

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

FOURTH ANNUAL REPORT

TO THE
GOVERNOR OF CALIFORNIA
BY THE
DIRECTOR OF PUBLIC WORKS

JANUARY, 1951

L. A. Weymouth

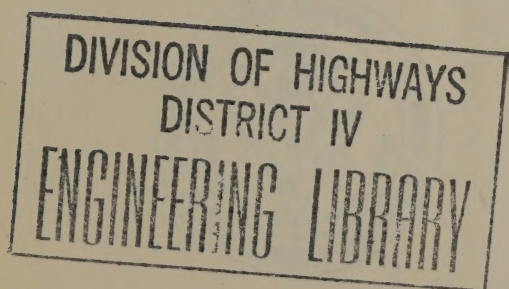
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FOURTH ANNUAL REPORT

OF THE

COMMISSION OF PUBLIC WORKS

JANUARY, 1931



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DEPARTMENT OF PUBLIC WORKS
DIVISION OF HIGHWAYS

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BY THE
DIRECTOR OF PUBLIC WORKS

January, 1951



EARL WARREN
Governor

C. H. PURCELL
*Director of Public Works and
Chairman, California Highway Commission*

G. T. McCOY
*State Highway Engineer and
Chief of Division of Highways*

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DEPARTMENT OF PUBLIC WORKS

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
C. H. PURCELL, Director of Public Works

DIVISION OF HIGHWAYS

G. T. McCOY, Sacramento
State Highway Engineer and Chief of Division of Highways

HEADQUARTERS STAFF

Public Works Building, Sacramento

FRED J. GRUMM Deputy State Highway Engineer

OPERATIONS

R. M. GILLIS Assistant State Highway Engineer
EARL WITHEYCOMBE Construction Engineer
G. F. HELLESOE Maintenance Engineer
T. E. STANTON Materials and Research Engineer
E. E. SORENSON Equipment Engineer

ADMINISTRATION

RICHARD H. WILSON Assistant State Highway Engineer
H. C. MCCARTY Office Engineer
H. B. LAForge Engineer County and Cooperative Projects
L. V. CAMPBELL Engineer City and Cooperative Projects
MILTON HARRIS Stores Engineer

PLANNING

J. W. VICKREY Assistant State Highway Engineer
J. C. YOUNG Traffic Engineer
CHAS. E. WAITE Design Engineer
J. C. WOMACK Planning Engineer
K. A. MACLACHLAN Highway Planning Economist
H. L. KILE Budget Engineer

BRIDGES

F. W. PANHORST Assistant State Highway Engineer
STEWART MITCHELL Design Engineer
I. O. JAHLSTROM Bridge Construction Engineer
E. L. WALSH Bridge Office Engineer
H. C. WOOD San Francisco-Oakland Bay Bridge Engineer

PERSONNEL, SERVICE AGREEMENTS, ETC.

J. G. STANDLEY Assistant State Highway Engineer
E. J. SADDINE Principal Highway Engineer

RIGHT OF WAY

FRANK C. BALFOUR Chief Right of Way Agent
E. F. WAGNER Deputy Chief Right of Way Agent
R. S. J. PIANEZZI Assistant Chief Right of Way Agent, Administration
E. M. MACDONALD Assistant Chief Right of Way Agent, Appraisals
G. S. PINGRY Assistant Chief Right of Way Agent, Field Supervision, North

ACCOUNTING

E. R. HIGGINS Comptroller
BERT SELLIER Assistant Comptroller
W. S. CULLY Assistant Comptroller

DISTRICT ENGINEERS

<i>District</i>		<i>Office</i>
I.	A. M. NASH.....	Eureka
II.	J. W. TRASK.....	Redding
III.	C. H. WHITMORE.....	Marysville
IV.	JNO. H. SKEGGS, Asst. State Highway Eng.....	San Francisco
	B. W. BOOKER, District Engineer	
	L. A. WEYMOUTH, District Engineer	
V.	E. J. L. PETERSON.....	San Luis Obispo
VI.	E. T. SCOTT.....	Fresno
VII.	P. O. HARDING, Asst. State Highway Eng.....	Los Angeles
	W. F. FAHEY, District Engineer	
	M. E. CESSNA, District Engineer	
VIII.	E. Q. SULLIVAN.....	San Bernardino
IX.	S. W. LOWDEN.....	Bishop
X.	J. G. MEYER.....	Stockton
XI.	E. E. WALLACE.....	San Diego

STATE OF CALIFORNIA
CALIFORNIA HIGHWAY COMMISSION

C. H. PURCELL, Chairman, Ex Officio, Sacramento

HOMER P. BROWN, Placerville-----	Term expires January 15, 1951
CHARLES T. LEIGH, San Diego-----	Term expires January 15, 1951
F. WALTER SANDELIN, Ukiah-----	Term expires January 15, 1952
JAMES A. GUTHRIE, San Bernardino-----	Term expires January 15, 1953
CHESTER H. WARLOW, Fresno-----	Term expires January 15, 1953
HARRISON R. BAKER, Pasadena-----	Term expires January 15, 1954

CALENDAR OF MEETINGS
CALIFORNIA STATE HIGHWAY COMMISSION

July 1, 1949 to June 30, 1950

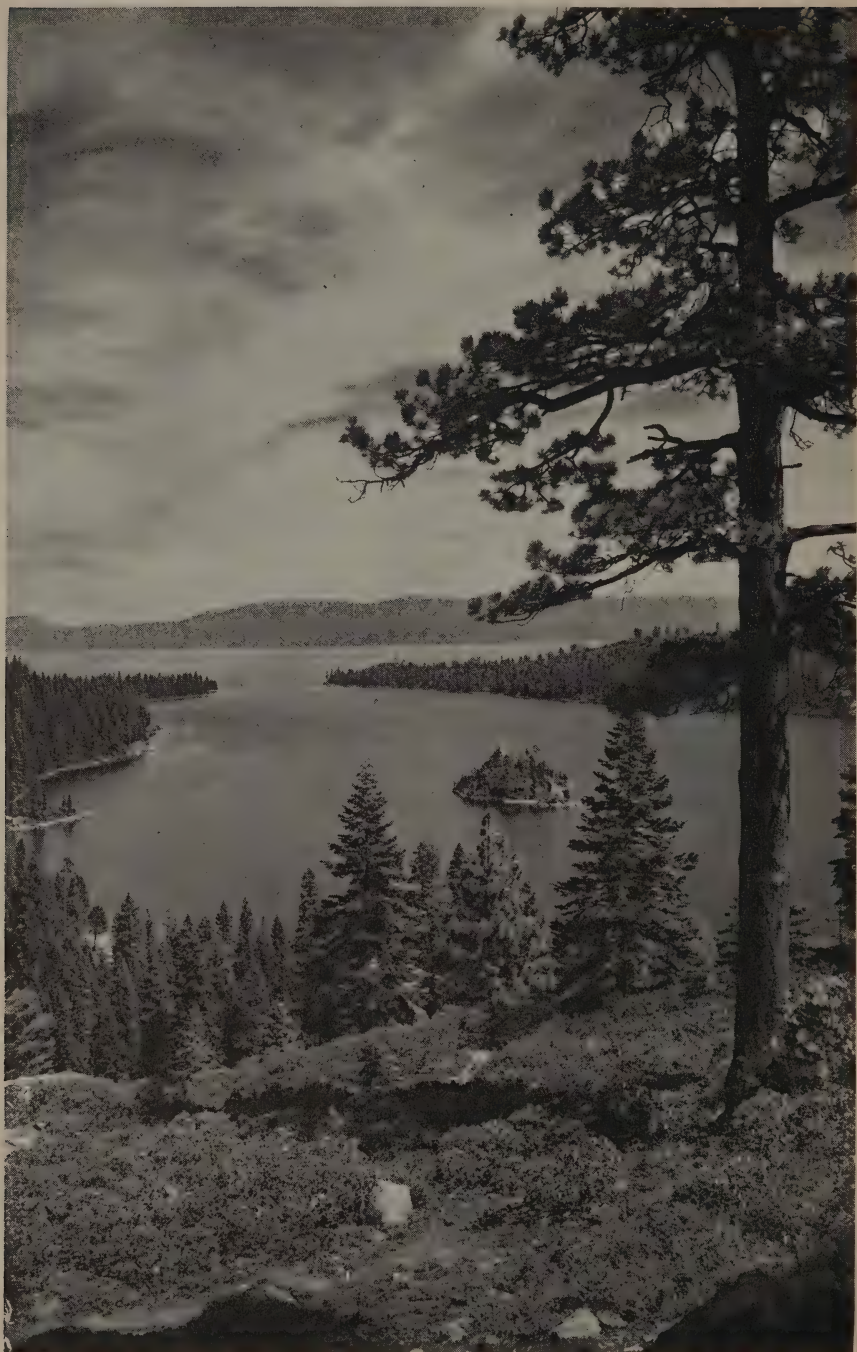
July 20 and 21, 1949-----	Sacramento
August 16, 17, and 18, 1949-----	Sacramento
September 13, 14, and 15, 1949-----	Sacramento
October 19 and 20, 1949-----	Sacramento
November 16 and 17, 1949-----	Sacramento
December 14 and 15, 1949-----	Sacramento
January 18 and 19, 1950-----	Sacramento
February 15 and 16, 1950-----	Sacramento
March 22 and 23, 1950-----	Sacramento
April 19 and 20, 1950-----	Los Angeles
May 17, 18, and 19, 1950-----	Sacramento
June 21 and 22, 1950-----	Sacramento

PAST MEMBERS OF THE CALIFORNIA HIGHWAY COMMISSION

Name	Residence	Date of appointment	Termination of membership
Burton A. Towne*-----	Lodi-----	Aug. 2, 1911	Resigned Jan. 14, 1914
Charles D. Blaney*-----	Saratoga-----	Aug. 2, 1911	Resigned Mar. 1, 1917
N. D. Darlington-----	Los Angeles-----	Aug. 2, 1911	Resigned Jan. 8, 1923
Charles F. Stern-----	Eureka-----	Jan. 15, 1914	Resigned Dec. 21, 1918
Henry J. Widenmann*-----	Vallejo-----	Mar. 1, 1917	Died Oct. 6, 1918
Charles A. Whitmore*-----	Visalia-----	Nov. 29, 1918	Resigned Jan. 8, 1923
Emmett Phillips*-----	Sacramento-----	Dec. 21, 1918	Died June 18, 1919
George C. Mansfield*-----	Oroville-----	June 24, 1919	Resigned Jan. 9, 1923
Harvey M. Toy*-----	San Francisco-----	Jan. 9, 1923	Resigned Jan. 3, 1927
Louis Everding*-----	Arcata-----	Jan. 9, 1923	Resigned Jan. 17, 1927
Nelson T. Edwards-----	Orange-----	Jan. 10, 1923	Resigned Jan. 3, 1927
Ralph W. Bull*-----	Eureka-----	Jan. 6, 1927	Resigned Jan. 6, 1931
J. P. Baumgartner*-----	Santa Ana-----	Jan. 6, 1927	Resigned Jan. 6, 1931
M. B. Harris*-----	Fresno-----	April 18, 1927	Resigned Jan. 6, 1931
Joseph N. Schenck-----	Los Angeles-----	Aug. 19, 1927	Resigned Jan. 6, 1931
Fred S. Moody*-----	San Francisco-----	Aug. 19, 1927	Resigned Jan. 6, 1931
Earl Lee Kelly-----	Redding-----	Jan. 6, 1931	Resigned Oct. 18, 1932
Frank A. Tetley*-----	Riverside-----	Jan. 6, 1931	Resigned July 31, 1935
Timothy A. Reardon-----	San Francisco-----	Jan. 6, 1931	Resigned May 7, 1936
Harry A. Hopkins-----	Taft-----	Jan. 6, 1931	Resigned Oct. 14, 1937
C. D. Hamilton*-----	Banning-----	Aug. 1, 1935	Died April 24, 1936
Dr. W. W. Barham-----	Yreka-----	Dec. 20, 1932	Resigned May 21, 1935
Ray Ingels-----	Ukiah-----	May 21, 1935	Resigned Oct. 4, 1935
H. R. Judah-----	Santa Cruz-----	May 7, 1936	Resigned Oct. 5, 1937
Philip A. Stanton*-----	Anaheim-----	Jan. 6, 1931	Resigned Mar. 3, 1939
Paul G. Jasper*-----	Fortuna-----	May 7, 1936	Resigned Mar. 3, 1939
William T. Hart-----	Carlsbad-----	July 7, 1936	Resigned Mar. 3, 1939
Robert S. Redington-----	Los Angeles-----	Oct. 5, 1937	Resigned Jan. 27, 1939
Frank W. Clark-----	Los Angeles-----	Jan. 27, 1939	Resigned Mar. 10, 1939
Lawrence Barrett-----	San Francisco-----	Mar. 3, 1939	Resigned Jan. 11, 1943
Iener W. Nielsen-----	Fresno-----	Mar. 3, 1939	Resigned Jan. 11, 1943
Amerigo Bozzani-----	Los Angeles-----	Mar. 3, 1939	Resigned Jan. 11, 1943
Bert L. Vaughn-----	Jacumba-----	Mar. 3, 1939	Resigned Jan. 11, 1943
L. G. Hitchcock-----	Santa Rosa-----	Mar. 10, 1939	Resigned Jan. 11, 1943
†Gordon H. Garland-----	Sacramento-----	Jan. 11, 1943	Resigned Sept. 14, 1943
†Mrs. Dora Shaw Heffner-----	Sacramento-----	Jan. 11, 1943	Resigned Sept. 14, 1943
†Miss Helen MacGregor-----	Sacramento-----	Jan. 11, 1943	Resigned Sept. 14, 1943
†Verne Scoggins-----	Sacramento-----	Jan. 11, 1943	Resigned Sept. 14, 1943
†William Sweigert-----	Sacramento-----	Jan. 11, 1943	Resigned Sept. 14, 1943
C. Arnholt Smith-----	San Diego-----	Sept. 14, 1943	Resigned Jan. 1, 1949

* Deceased.

† Member of the Interim Commission.



View of EMERALD BAY, LAKE TAHOE, from State Sign Route 89

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
FOURTH ANNUAL REPORT TO THE GOVERNOR
ON THE ACTIVITIES OF THE DIVISION
OF HIGHWAYS

FOR THE YEAR JULY 1, 1949, TO JUNE 30, 1950

HONORABLE EARL WARREN

Governor, State of California

DEAR GOVERNOR WARREN: In accordance with the provisions of Section 143 of the Streets and Highways Code, as amended by the Collier-Burns Highway Act of 1947, it is my pleasure to submit to you the Fourth Annual Report of the Division of Highways, Department of Public Works, which presents a review of progress in state highway development under my direction during the Fiscal Year July 1, 1949, to June 30, 1950.

The report, as prepared and submitted to me by the State Highway Engineer, deals with the work and problems of the Division of Highways during the year and discusses in detail the more important phases of operations, administration, planning, bridges, and right of way acquisition.

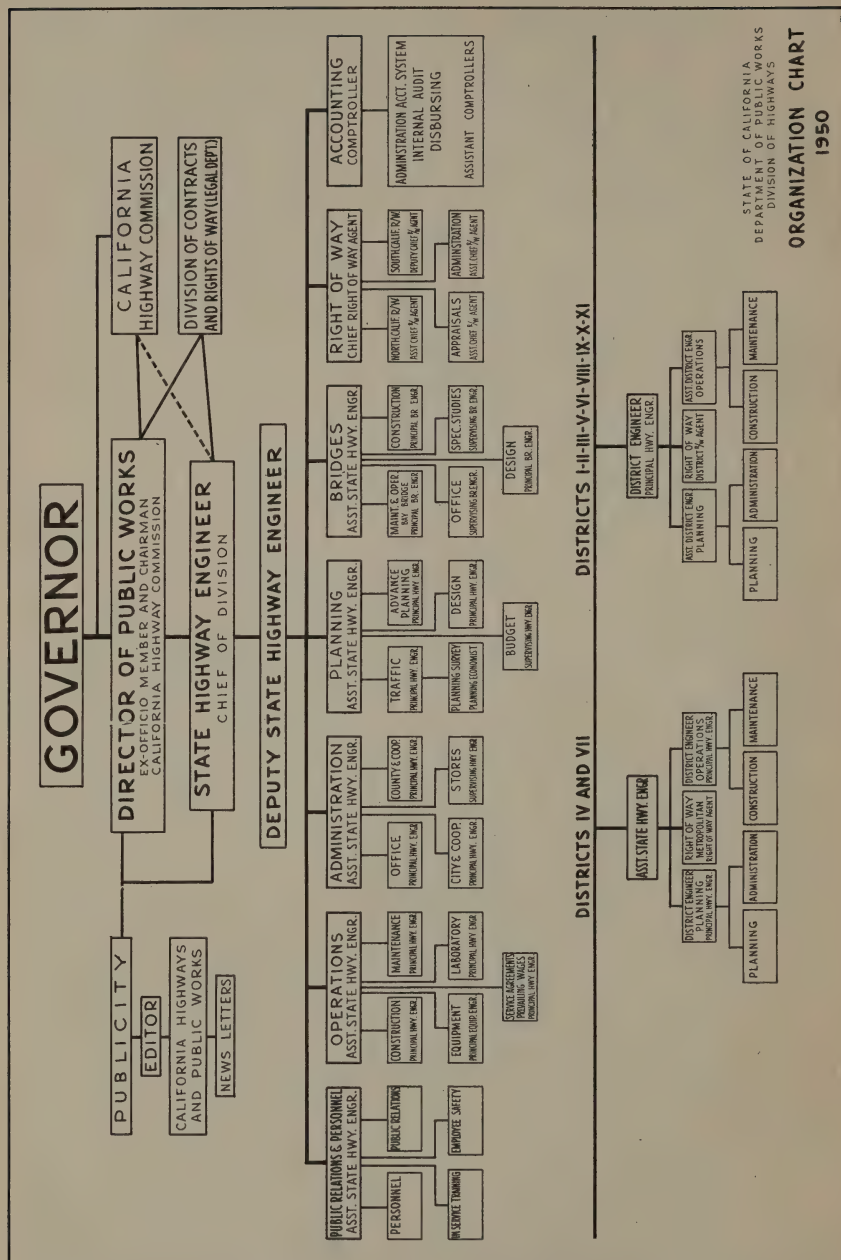
Particular reference is made to the State Highway Engineer's personal report and the sections given over to administration and planning for information relative to the volume of highway construction initiated during the year and progress in carrying out provisions of the Mayo Amendments to the Collier-Burns Highway Act requiring minimum expenditures for state highway construction in each of the 58 counties.

The report also embraces complete financial and statistical data relating to the general administration of the Division of Highways.

Respectfully,



Director of Public Works



FOURTH ANNUAL REPORT
BY THE
STATE HIGHWAY ENGINEER

July 1, 1949 to June 30, 1950

HONORABLE CHARLES H. PURCELL
Director of Public Works
State of California

SIR: During the fiscal year from July 1, 1949, to June 30, 1950, the Division of Highways advanced its program of construction and reconstruction on the State Highway System to the extent of available funds voted for highway development by the Highway Commission.

June 30, 1950, marked the close of three years of state highway operations under provisions of the Collier-Burns Act of 1947 by which the State highway financial structure in California was revamped.

It is with satisfaction that I report the very splendid progress made in meeting the provisions of the so-called Mayo Amendments to the Collier-Burns Act which set up minimum expenditures for each of the 58 counties during five-year periods. In a majority of instances these five-year minimums have been met within the first three years and in many cases they have been exceeded. There appears no doubt that by June 30, 1952, the end of the first five-year period, the county minimum expenditures for state highway construction will be exceeded in every county. These conditions indicate the thorough budgeting job being accomplished in keeping the construction program on a state-wide basis.

During the year (July 1, 1949-June 30, 1950) the Division of Highways let a total of 369 contracts, the construction value of which amounted to \$67,440,000 including construction engineering but not including right of way. Expenditures for right of way acquisition for the fiscal year totaled \$24,721,000.

The total of \$67,440,000 in construction contracts awarded during the year includes \$58,918,000 for improvement to state highways; \$5,759,000 for federal aid secondary contracts in improvement to county roads located on the Federal Aid Secondary Highway System; and \$2,763,000 for maintenance contracts and miscellaneous work.

The amount of \$58,918,000, representing the construction value of contracts awarded for improvement to the State highway system, includes a total of \$49,437,000 in contracts financed from the Highway Commission's budget for the 1949-50 Fiscal Year and \$9,481,000 in contracts financed from the budget for the 1950-51 Fiscal Year and awarded between April 1, and June 30, 1950, under the provision of the Collier-Burns Act which permits award of contracts on or after April 1st prior to the beginning of the fiscal year in which such contracts are to be financed.



CABRILLO FREEWAY, U. S. Highway 395, through Balboa Park, showing Laurel Street Overcrossing in the City of San Diego

The total of \$67,440,000 in highway construction under the administration of the department involved improvement of 847 miles of highway and construction of 148 bridges and grade separations.

Development of the expressway and freeway type of highway continues to be a major aspect of the Division of Highways' activities. During the year additional sections of the East Shore and Santa Ana Freeways were opened to traffic in the metropolitan areas of San Francisco Bay and Los Angeles. The Stockton By-Pass on U. S. 99 was opened, as was the expressway through Santa Rosa on the Redwood Highway. Additional freeway construction projects were let to contract on the Bay Shore and East Shore freeways; on U. S. 101 between Los Angeles and San Francisco; U. S. 99, both on the Ridge Route and at various locations in the San Joaquin Valley. The Hollywood Freeway in Los Angeles is rapidly taking shape and development of the Santa Ana Freeway to the south is marked by several contracts; work was started on structures for the Harbor Freeway in down-town Los Angeles. On the Ramona Freeway construction advanced during the year and, of vital importance to the future development of the route, the freeway agreement was finally executed with the city of Pomona. Similarly the way was cleared by agreement for development of U. S. 101 to freeway standards through Oceanside and other small cities.

Of the \$67,440,000 in highway construction for the year, \$39,190,000 represents the value of contracts involving improvements to freeway or expressway standards. This figure clearly indicates the department's efforts to meet the problems of traffic congestion in urban areas and on the State's principal arterials.

At the present time there are 760 miles of completed freeways on the State Highway System and of these 431 miles have been completed since the war. Contracts are now underway on an additional 179 miles of freeways.

As an index to the size of the Division of Highway's construction programs the accompanying chart, showing the number and value of going contracts on the first of each month since the passage of the Collier-Burns Act, is of considerable interest.

On the following pages of this report will be found discussions in detail of the past year's work, under the several functions of state highway administration which verify the statements I have made relative to the over-all progress in highway development and bear out my contention of the efficient and thorough operations of the department.

Contract work awarded for the Division of Highways for the year July 1, 1949 to June 30, 1950, segregated by types and mileage, is shown in the accompanying tabulation on page 20. The tabulation on page 21 shows the total miles of the State Highway System by types and by rural and urban highways.

The tabulation of average contract prices for major items of construction over the years appears in Appendix "D" at the end of the report. Studies in construction cost trends have been continued during the past year from which has been established a tabulation, covering the period since 1940, of cost indices for California by years, and currently

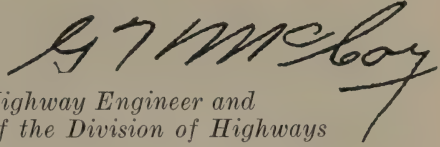


View of MISSION VALLEY ROAD interchange over Cabrillo Freeway U. S. 395, at San Diego, showing illumination. Taken at 2.30 a. m.

by quarters. The tabulations in Appendix "D" are correlated to the indices produced from these studies.

In the several appendices following the text of the report are given the important accounting and contract statistics.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "G. T. McLoy". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

*State Highway Engineer and
Chief of the Division of Highways*



AERIAL VIEW OF U. S. 40 looking easterly from Cordelia Underpass in foreground

CONTRACTS AWARDED BETWEEN JULY 1, 1949 AND JUNE 30, 1950

State Highway System

<i>Number of contracts</i>	<i>Type</i>	<i>Miles</i>
17	Portland cement concrete	67.7
5	Asphalt concrete	14.9
124	Plant mix and road mix surfacing	534.6
9	Bituminous surface treatment	26.8
4	Seal coat	80.9
1	Grading	4.8
60	Traffic signals and lights	
54	Bridges	
28	Miscellaneous	
<hr/> 302	Totals	<hr/> 729.7

Not on State Highway System

COUNTY ROADS FEDERAL AID SECONDARY

12	Plant mix and road mix surfacing	48.9
4	Bituminous surface treatment	17.2
1	Seal coat	12.6
9	Grading	35.3
1	Traffic signals and lights	
15	Bridges	
18	Miscellaneous	
<hr/> 60	Totals	<hr/> 114.0

STATE INSTITUTIONS

1	Plant mix and road mix surfacing	1.2
---	--	-----

STATE PARKS

1	Plant mix and road mix surfacing	2.0
2	Bridges	
1	Miscellaneous	
<hr/> 4	Totals	<hr/> 2.0

MILEAGE BY TYPES OF STATE HIGHWAYS
(Including Totals for Urban and Rural)
June 30, 1950

TYPE	NORTH			SOUTH			Totals		
	Outside cities	Inside cities	Total	Outside cities	Inside cities	Total	Outside cities	Inside cities	Grand total
Portland cement concrete.....	704.618	96.255	800.873	704.978	219.813	924.791	1,409.596	316.068	1,725.664
Asphalt concrete.....	390.646	188.311	578.957	346.447	220.803	565.950	736.093	378.814	1,114.907
Dual and combination types ¹	421.006	36.615	457.621	241.038	82.882	324.270	262.644	186.107	448.751
Bituminous macadam.....	365.334	26.583	391.917	135.131	66.340	201.471	800.548	82.923	583.388
Plant mix gravel.....	1,626.498	71.063	1,698.761	1,566.080	103.029	1,668.776	2,091.548	174.692	3,266.240
Road mix gravel.....	952.629	10.140	962.769	1,486.038	13.704	1,568.142	2,400.667	25.244	2,425.911
Oiled gravel.....	1,335.181	12.853	1,348.034	71.658	1.371	73.009	1,406.810	14.204	1,421.023
Gravel.....	11.223	0.132	11.355	---	---	---	11.355	---	11.355
Oiled earth.....	1,135.755	3.984	1,139.739	1,126.893	6.572	1,133.465	2,262.648	10.556	2,273.204
Earth.....	201.763	---	201.763	66.564	---	66.564	268.417	---	268.417
Bridges.....	60.424	12.462	72.886	20.896	6.547	27.443	90.920	19.009	109.829
Unconstructed road.....	56.100	29.806	85.906	156.982	33.978	190.960	213.082	63.784	276.866
Totals.....	6,861.177	488.784	7,349.961	5,932.845	745.839	6,678.684	12,794.022	1,204.623	13,998.645

¹ Dual and unclassified types consist of two or more parallel types of surfacing.

NOTE: This table does not include nonadd mileage such as outer highways, connections, etc.



Aerial View of SANTA ROSA FREEWAY, U. S. Highway 101,
in the heart of City of Santa Rosa

OPERATIONS

As pointed out in recent annual reports, the Assistant State Highway Engineer, Operations, exercises executive control over the four phases of state highway activity which are classed under the general category of "Operations." These include Construction, Maintenance, Materials and Research, and Equipment.

On the pages immediately following are reports on the department's activities for the fiscal year between July 1, 1949, and June 30, 1950, in these four phases of the work.

CONSTRUCTION

During the 1949-50 Fiscal Year the total construction value of highway projects on which contracts were awarded, pending award, or advertised for bids at the close of the period, was only slightly less than that for the preceding fiscal year. During the year bids were opened on 385 projects as compared with 384 for 1948-49, and there were only six projects on which all bids were rejected, as compared with 20 the previous year.

The average number of bidders per project, considering both road and structure projects combined, was 7.3, ranging from a maximum of 10.8 in December, 1949, to a minimum of 5.2 in June, 1950. While this shows an increase over the average of 6.0 bidders per project in the 1948-49 Fiscal Year and is an indication of healthy competition in the highway construction industry, the drop during the closing months of the fiscal year is evidence of a tightening within the industry. A noticeable increase in bid prices during the second quarter of 1950 is another indication in this direction.

Construction Practice

Grading—In an attempt to extend the economical operating radius of tractor-drawn earth-moving equipment, manufacturers are settling down to the production of two separate and distinct types for heavy grading work. The large capacity units, drawn by crawler type tractors, are designed for the short haul operations, and the smaller capacity units, to be drawn by rubber-tired motive equipment, have been materially speeded up for the longer hauls. The latest development in the lighter type is an electrical control with fingertip operation of all the movements of the equipment. The well-balanced earth-moving organization of today includes both types of equipment.

The average price bid per cubic yard for grading is down 18 percent this year from that of the previous year; however, the average price for



CONTINUOUS MIXER with cement silo and auger for cement treatment



DEBRIS DEFLECTOR at inlet end of pipe culvert



PLACING HEAVY RIP-RAP along coast in Ventura County adjacent to U. S. 101



HEAVY GRADING OPERATIONS in Santa Clara County,
reconstruction Pacheco Pass road, S. R. 152



GRADING OPERATIONS in widening of Ridge Route, U. S. 99
from three lanes to four-lane divided



WIDENING PORTION OF RIDGE ROUTE, U. S. 99, from three lanes
to four-lane divided freeway

the second quarter in 1950 is up 18 percent over that of the first quarter, which is in step with the present rise in the over-all highway cost index, as discussed in the administration section of this report.

Pavement Reconditioning—Much reconditioning work has been carried out on the State Highway System during the past year, consisting of scarifying the surface and base together and treating the pulverized material with cement or hydrated lime to overcome plasticity. A limited amount of this work was performed in previous years, and the results were so gratifying under some of the most severe traffic conditions that this treatment has come into general practice where base failure from plastic properties has been experienced.

Heretofore the practice has been to pulverize the bituminous surfacing and mix it in with the cement treatment. This makes it necessary to provide a new bituminous surface to complete the road. Experiments are now being conducted to develop a means of salvaging the existing bituminous surface and rework it into a satisfactory mixture that can be relaid after the base is completed. Early results indicate that successful methods can be obtained; the practicability of the operation will depend upon its relative cost.

Bituminous Surfaces—Plant-mixed surfacing continues to exceed by far the use of asphalt concrete, the latter providing only 1 percent of the year's total for these two bituminous types. Both are laid without the use of side forms.

Portland Cement Concrete Pavements—The continued use of unedged weakened plane transverse joints has materially added to the riding qualities of this type of pavement. No treatment so far developed, however, has proved successful in overcoming the subsequent tendency of the panels to curl at the slab ends.

No indications are apparent at this time that excessive stresses have been set up in any of the concrete pavements laid to date without the use of expansion joints. Indications are that pumping and stepoff have been overcome by the change in design.

Project Reports, Preliminary Reports, Plans and Specifications

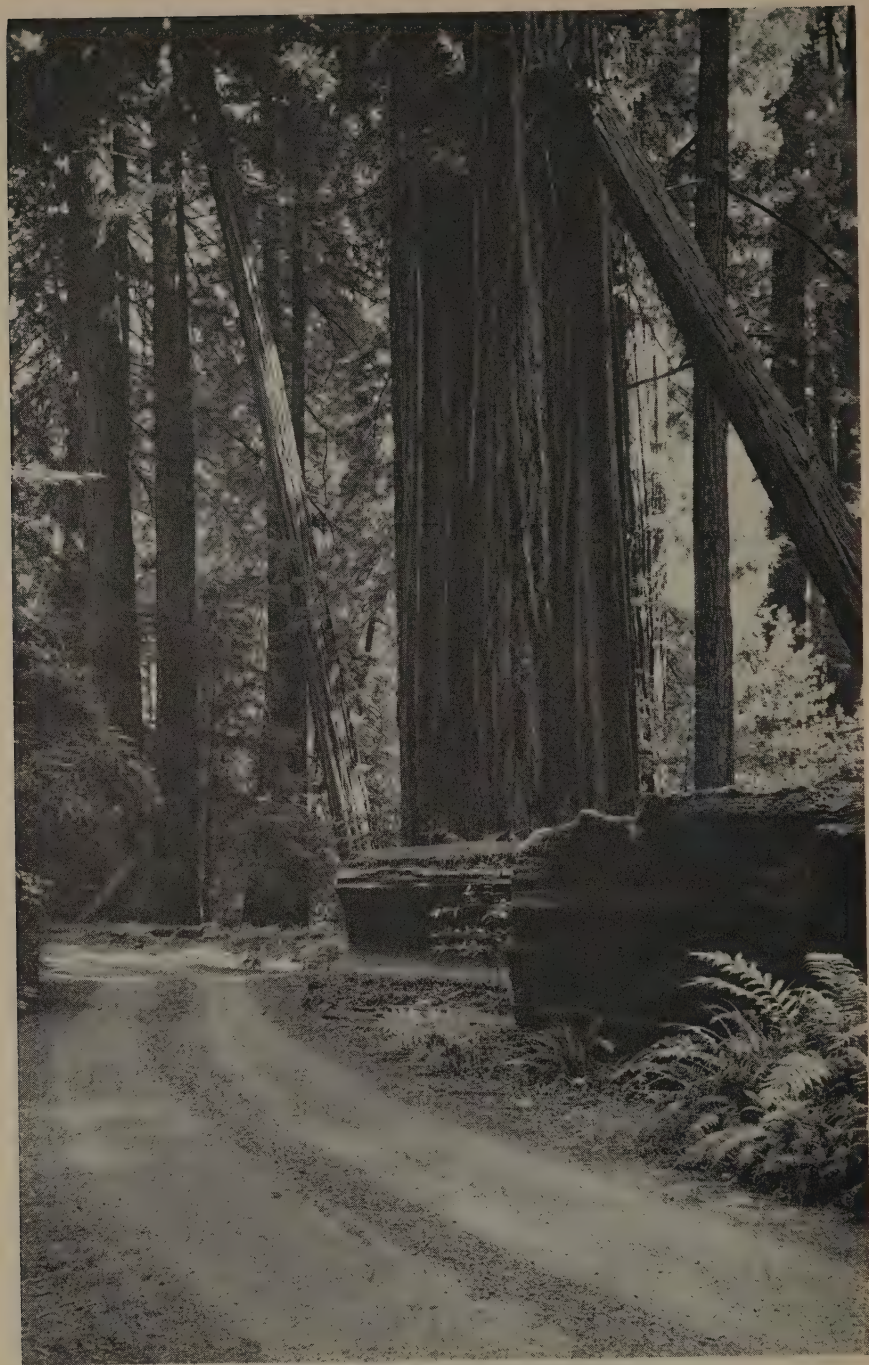
All project reports, preliminary reports, plans and specifications for proposed construction projects on state and federal secondary projects are reviewed by the construction staff engineers prior to advertising for bids.

The Construction Engineer works closely with the Office Engineer and the Design Engineer on specification and structural features in order to insure uniform construction practice and to incorporate improved standards in highway foundations and pavements.

Contractors' Claims

During the fiscal year, five claims in connection with completed contracts were presented to the Board of Review.

The Board of Review, consisting of the Assistant State Highway Engineer, Operations; the Assistant State Highway Engineer, Administration; the Assistant State Highway Engineer, Bridges, and a senior member of the legal staff, is the body which holds hearings on contractors'



REDWOOD STATE PARK, HUMBOLDT COUNTY

claims for consideration and recommendation for action to the State Highway Engineer. Of the five claims presented during the year, two were denied in their entirety and the remaining three were settled by agreement. One claim from a previous year went to trial on which there has not as yet been a court ruling. Another claim from a previous year is still pending probable court action.

Joint Departmental Bank Protection Committee

Construction department activities include participation in the Division of Highways Joint Departmental Bank Protection Committee assigned to investigation, study, report, and recommendations for the purpose of establishing general policies covering the design and construction of bank protection, shore protection and erosion control. The work of this committee should result in a valuable contribution to this phase of highway engineering.

Construction Manual

In January of 1950, the department published the fifth edition of its Construction Manual. This publication has modernized the instructions in previous manuals and serves as a guide to office and field engineers on construction matters not covered in the specifications.

Prison Labor Projects

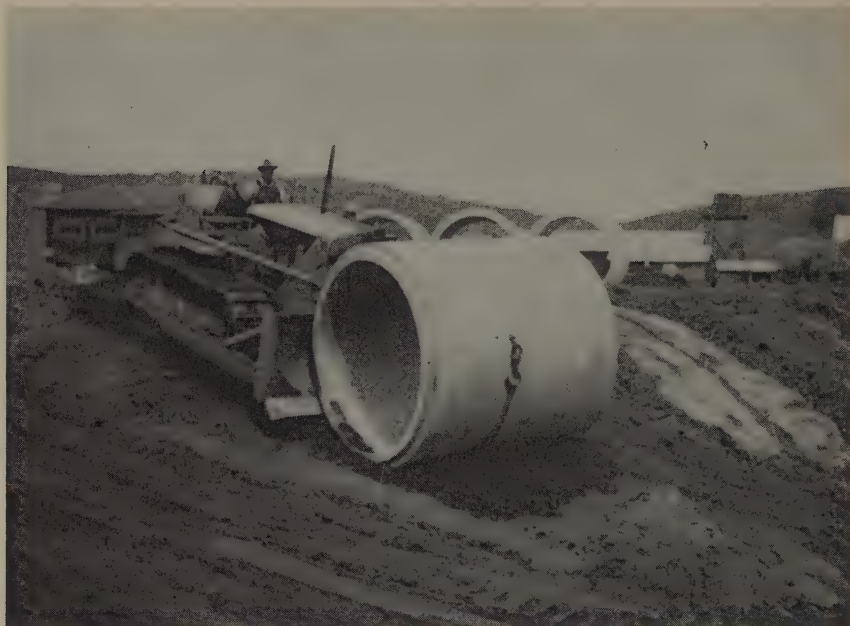
Four prison road camps were in operation at the start of the fiscal year; however, the camp in San Diego County was closed in February, 1950, and only three camps were active at the year's close.

The camps in operation are as follows: Camp 36 in Trinity County on the Trinity Lateral between Redding and Arcata; Camp 37 on the Angeles Crest Highway in Los Angeles County; and Camp 39 in Modoc County on the Alturas-Lakeview Highway. Camp 40 in San Diego County, which was closed in February, was in operation on the San Diego to El Centro Highway in the vicinity of Descanso.

Grading operations by camp forces in Trinity County were completed on another section of approximately two miles and in Modoc County on a section of approximately seven miles. A light application of liquid asphalt was placed on each section.

The following tabulation shows camp locations and inmate population as of June 30, 1950:

<i>Camp. No.</i>	<i>Road</i>	<i>Location</i>	<i>Inmate quota</i>	<i>Number as of June 30, 1950</i>
36	I-Tri-20-C, D	Burnt Ranch	60	62
37	VII-L.A-61-C, D	Cedar Springs	110	106
39	II-Mod-73-A, B	Sugar Hill	50	56
Totals			220	224



HANDLING 9-TON SECTIONS 84" REINFORCED CONCRETE PIPE

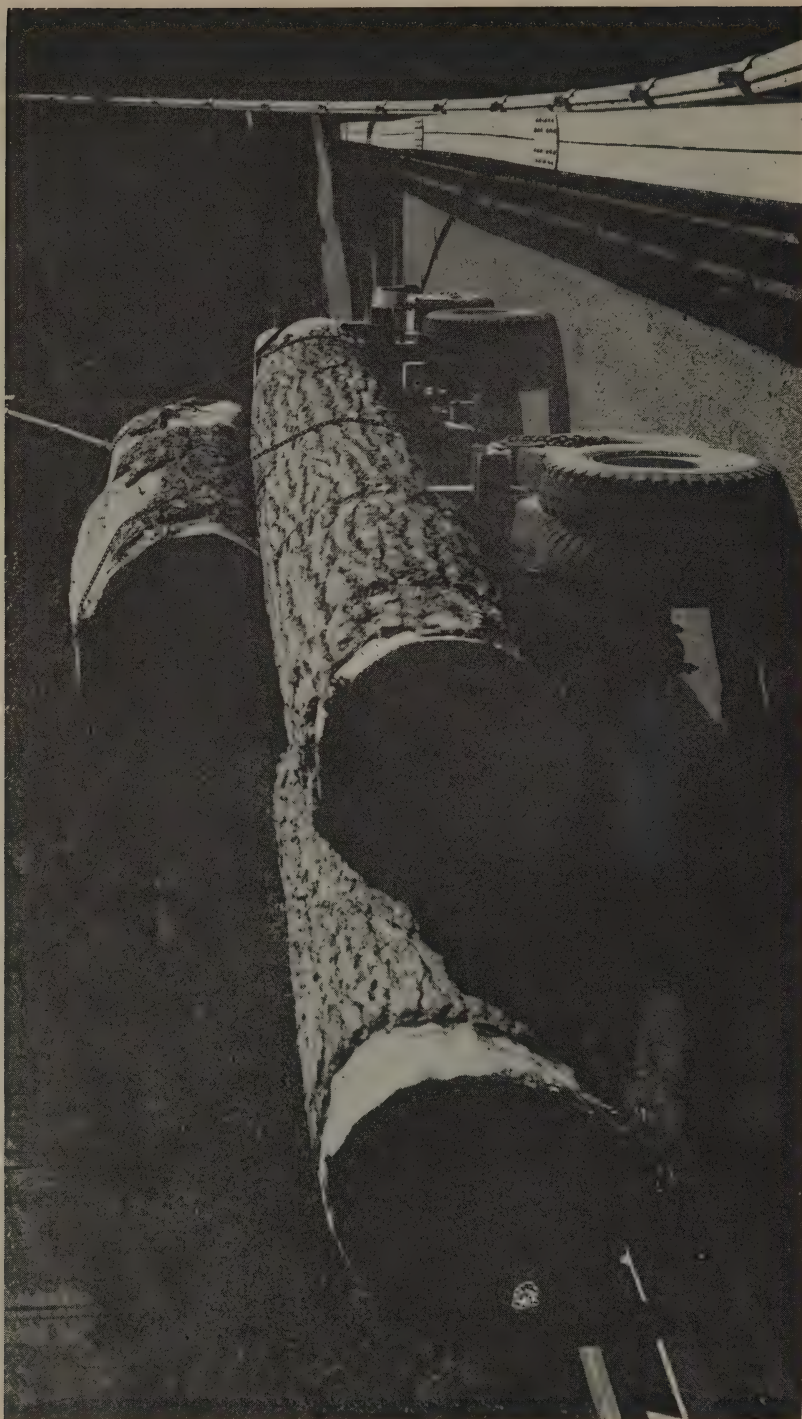


HEAVY GRADING OPERATIONS on Pacheco Pass Route,
S. R. 152 in Santa Clara County



TYPICAL SIGN placed on freeway construction projects

CLOSE-UP VIEW OF THE SANTA ROSA FREEWAY, U. S. 101,
through the City of Santa Rosa



TYPICAL LOAD OF LOGGING TRUCK on narrow bridge, Mad River bridge in Humboldt County, U. S. 299

MAINTENANCE

Conditions affecting maintenance of California State highways for the year ending June 30, 1950, were generally favorable. Traffic encountered some difficulty in snow areas for two brief periods during the winter. The cost of snow removal and sanding icy pavement exceeded that for any previous winter except for the 1948-49 season, however, the increased expenditures resulted in an expanded program and increased service to the traveling public. Damage to road surfacing due to frost action was limited as compared to the previous year. There was little damage due to floods.

The cost of maintenance work rose somewhat during the year because of the increase in rental rates for state-owned equipment, which became effective October 1, 1949. There was also an increase in the maintenance work load due to completion of additional divided highways and freeways which involve landscaping, and the installation of additional traffic signals and of highway lighting units at many locations. Records of traffic counts indicate that the traffic volume for the year, as represented by monthly counts at some 85 locations, was more than 7 percent greater than for the previous year.

Maintenance Stations

The program for acquisition and improvement of maintenance stations was carried on as planned for the year. Several projects, being constructed by contract, were still under way as of June 30th. These include the Wheaton Wash Station in District VIII, the Placerville Station, a maintenance superintendent's office at Petaluma, and a second cottage at Fort Ross. There is also some work, such as improvements at Middletown Station, which was still under way by day labor forces.

A change in accounting procedure was adopted during the year to permit a collection of maintenance and repair costs in the buildings and plants account. The practice of charging annual depreciation of improvements against maintenance funds was discontinued.

The maintenance buildings and plant program for the year was as follows:

Purchase and improvement of maintenance stations-----	\$333,800
Maintenance and repair -----	142,000
Radio installations -----	170,000
Total-----	<u>\$645,800</u>

Snow Removal and Sanding Slippery Pavements

Allocations for this work for the 1949-50 season totaled \$1,251,000. This compares with the sum of \$1,507,000 for the previous season. The work extended from October 18, 1949, when the first storms occurred, to June 9, 1950, when the last mountain route was opened, making a total of 233 days. This compares with 211 days for the previous season. There were no unusual developments in this phase of public service, except for the increase in amount of sanding slippery pavements and an exceptionally heavy fall in the Redding district area. It is estimated that more than \$300,000 was expended on sanding operations.



STEAM CLEANING STEEL BRIDGE prior to painting. H Street crossing of American River, at Sacramento

Major Slides and Storm Damage

No severe flooding or unusual slide conditions developed during the year. There is always heavy sluffing of slopes because of weathering and some heavy slides due to saturation of the slope materials. Allocations for this work totaled \$1,333,428 for the year. There were a number of occasions when sections of highways were closed to traffic for a few hours and occasionally for a day or more, however, the season was not unusual in this regard.

Repair of Traveled Way and Shoulders

The program for repair of traveled way and shoulders for the 1949 season was set up for work on approximately 2,500 miles of traveled way and some 820 miles of shoulders. This program is necessarily adjusted during the course of the work in order to take care of the portions showing greatest distress. The work consists of various types, including penetration treatment, reprocessing, light surface blankets and restoration of shoulders, as well as application of seal coats. The sum of \$3,845,000 was allocated to the eleven districts under this program. This represents 20 percent of funds available for maintenance purposes for the fiscal year.

Bridge Repair and Maintenance

Bridge repair and maintenance was carried on during the year upon the basis of the recommendation of the bridge department, which is charged with the responsibility of bridge inspection. The cost of this phase of the work is financed from funds budgeted for maintenance work. The minor bridge repair jobs are financed through blanket authorizations issued to each district. When it appears that the cost of the work at a particular bridge will exceed \$300, a special allotment is issued. During the year, 167 such authorizations were required varying from the minimum up to \$12,000. The average amount for each project was about \$1,000.

In addition to the small projects by state forces, the painting and major repair jobs were handled under contract. The painting contract allotments totaled \$165,702 and the major repair work nearly \$70,000. The total authorizations issued for all bridge repair and painting for the year were \$481,024. It is anticipated that this amount will be considerably increased during the 1950-51 Fiscal Year, as the painting program alone is \$375,000. A part of this increase is due to the necessity of catching up on painting work deferred during the war years. There have been a number of new steel structures erected in recent years and the cost of painting will increase from year to year.

Maintenance of State Highways in Cities

The maintenance of state highways in cities has been under the direct control of the Maintenance Engineer of the Division of Highways organization for two and one-half years, as provided in the Collier-Burns Act of 1947. During this period, the major problems which developed have been worked out in a generally satisfactory manner. These problems included the frequency of sweeping and street cleaning, distribution of the cost of street lighting, operation of traffic signals and items of this type, where local needs or desires conflicted to some extent with the need when considered from the viewpoint of through traffic. City authorities have been very cooperative in working out these problems.



CONSTRUCTION OPERATIONS on realignment of U. S. 101 in Del Norte County
between Smith River and Winton Corner



ROADSIDE DRINKING FOUNTAIN on Redwood Highway, U. S. 101,
between Miranda and Weott in Humboldt County

The policy of authorizing cities with adequate street maintenance organizations to maintain the highways has been continued. On the basis of routine work only, city crews maintained 615 miles, while 512 miles were maintained by state forces. There is always a certain amount of overlapping in the classes of work performed, as some cities carry out sweeping and cleaning only and state forces do most of the traffic striping and pavement marking, as few cities have the special equipment required for this work. Expenditures for the year are necessarily estimated, as there is a certain amount in carry-over of charges accrued in June which do not appear in the total for the fiscal year. The total is approximately as follows:

City forces	\$1,407,787
State forces	1,693,977
Total	\$3,101,764

Subsealing and Filling Joints in Concrete Pavements

The program of subsealing and filling joints in concrete pavements was continued during the year. Subsealing was carried out by maintenance forces from both maintenance and construction funds as follows:

<i>District</i>	<i>Amount maintenance</i>	<i>Amount construction</i>	<i>Total</i>
III	\$13,650	-----	\$13,650
IV	79,510	\$89,235	168,745
V	20,855	-----	20,855
VI	12,600	-----	12,600
VII	30,354	23,000	53,354
X	57,480	-----	57,480
Totals	\$214,449	\$112,235	\$326,684

The total cost of this type of work for the last five years is \$924,000. Of this total, \$758,265 was financed from maintenance funds.

Joint sealing was carried out in eight districts by state forces using latex emulsion as a filler. Some 85.6 miles of pavement was sealed at a cost of \$67,400, or about \$788 per mile. This is at a rate of about 7.3 cents per lineal foot of joint. In addition, work was done by contract on 32.4 miles in two districts at a cost of \$31,000, which is about \$957 per mile or 7.9 cents per lineal foot of joint.

Maintenance of Trees, Landscaped Areas, and Erosion Control

This work is a continuing program and the allocation of funds required is shown for the 1948-49 and 1949-50 Fiscal Years for four major items.

	<i>Year</i>	
	<i>1948-49</i>	<i>1949-50</i>
Fire hazard control	\$147,534	\$171,140
Noxious weed control	61,685	62,581
Erosion control	185,000	466,545
Tree removal	25,000	23,870

Warning and Directional Signs

The maintenance of official highway warning, regulatory, and guide signs required a total of 4,635 man-days of labor and the services of 17 specially constructed sign trucks.



MEYERS GRADE, U. S. 40, East of Echo Summit, El Dorado County.
Built under supervision of U. S. B. P. R.

The districts were allotted approximately \$237,000 for the maintenance and installation of signs. The department erected 19,884 new signs during the year. This includes new installations on construction work, as well as replacements. Some 81,300 signs were repaired, painted, and touched up as part of the upkeep program.

The four-inch height letters on signs in the warning series have been changed to six-inch, making this type of sign more legible and more effective for present day traffic.

Traffic Striping and Pavement Marking

Allotments for traffic striping and pavement marking during the year, including work on state highways within cities, amounted to \$617,000. This amount was used to provide traffic lines on 11,500 miles of state highways.

The use of small glass beads has been continued to improve the effectiveness of the line for night travel. Specifications were changed to provide for smaller diameter beads and a uniform grading between No. 25 and No. 75 U. S. Standard sieves is required. The smaller size beads become more firmly embedded in the traffic paint binder, and, as a result, longer wear in the traffic lines is secured.

During each of the past two years, the maintenance department, working with the materials and research laboratory, has applied 500 gallons of experimental lacquer in each highway district using ingredients that are readily available in the United States. The standard traffic lacquer contains titanium dioxide, tung oil, and East India gums, which, during periods of emergencies, are in short supply or not available. Substitute materials have, therefore, been applied in an effort to produce a traffic line with the same wearing qualities. The results, to date, have not been too encouraging, as substitute materials failed to produce the same whiteness as the titanium dioxide pigment. Furthermore, domestic oils and resins apparently do not have the wearing qualities found in tung oil and East India gums.

Traffic Signals

There has been an increase of about one hundred in the number of signalized intersections during the last year, as well as the addition of some 700 lighting units. Naturally, it has been necessary to adjust the force required to maintain these installations. It is estimated the increase in annual cost of maintenance due to these additional facilities will approximate \$75,000.

Radio Communication

The Division of Highways is engaged at the present in converting the existing AM highway radio system to a modern high frequency FM system. Survey work has been completed in Districts I, III, VI, and VII and installation work is under way in Districts I, VI, and VII. During the 1950-51 Fiscal Year installation work will be completed in those four districts and, in addition, Districts II, VIII, and IX will be surveyed and installed. By July 1, 1951, it is estimated this division will have in operation 42 base stations, 17 repeater stations, 15 control stations, and 230 mobile units. The equipment will represent a total expenditure of



NEW ALIGNMENT OF U. S. 101 across sand spit at Freshwater Lagoon
in Humboldt County



COMPLETED CONSTRUCTION ON U. S. 99 near Hornbrook in Siskiyou County

approximately \$368,000. The program for the state-wide installation includes the survey and installations in Districts IV, X, and XI in the 1951-52 Fiscal Year and District V and the remainder of District VI in the 1952-53 Fiscal Year.

Outdoor Advertising

The administration of the Outdoor Advertising Act has been carried out on the same basis as in the past. The comparative records for three years are as follows:

Number of operators licensed during fiscal year:

1947-48	780
1948-49	786
1949-50	789

Number of permits issued and gross receipts during fiscal year:

Year	Signs	Structures	Gross receipts
1947-48	421	23,969	\$55,367.80
1948-49	477	28,343	62,258.54
1949-50	603	29,817	64,588.27

Permits

The only change in the practice of handling permits relating to movement of oversize or overweight loads or for encroachments within the highway right of way was in the form of permit relating to utility encroachments. The form of permit and the regulations for such encroachments were revised to better fulfill the intent of current legislation.

There was a considerable increase in the number of transportation permits issued as compared to the previous year:

	Number of permits issued	
	Year ending June 30, 1949	Year ending June 30, 1950
Transportation permits	26,456	32,239
Encroachment permits	15,199	14,826
Totals	41,655	47,065

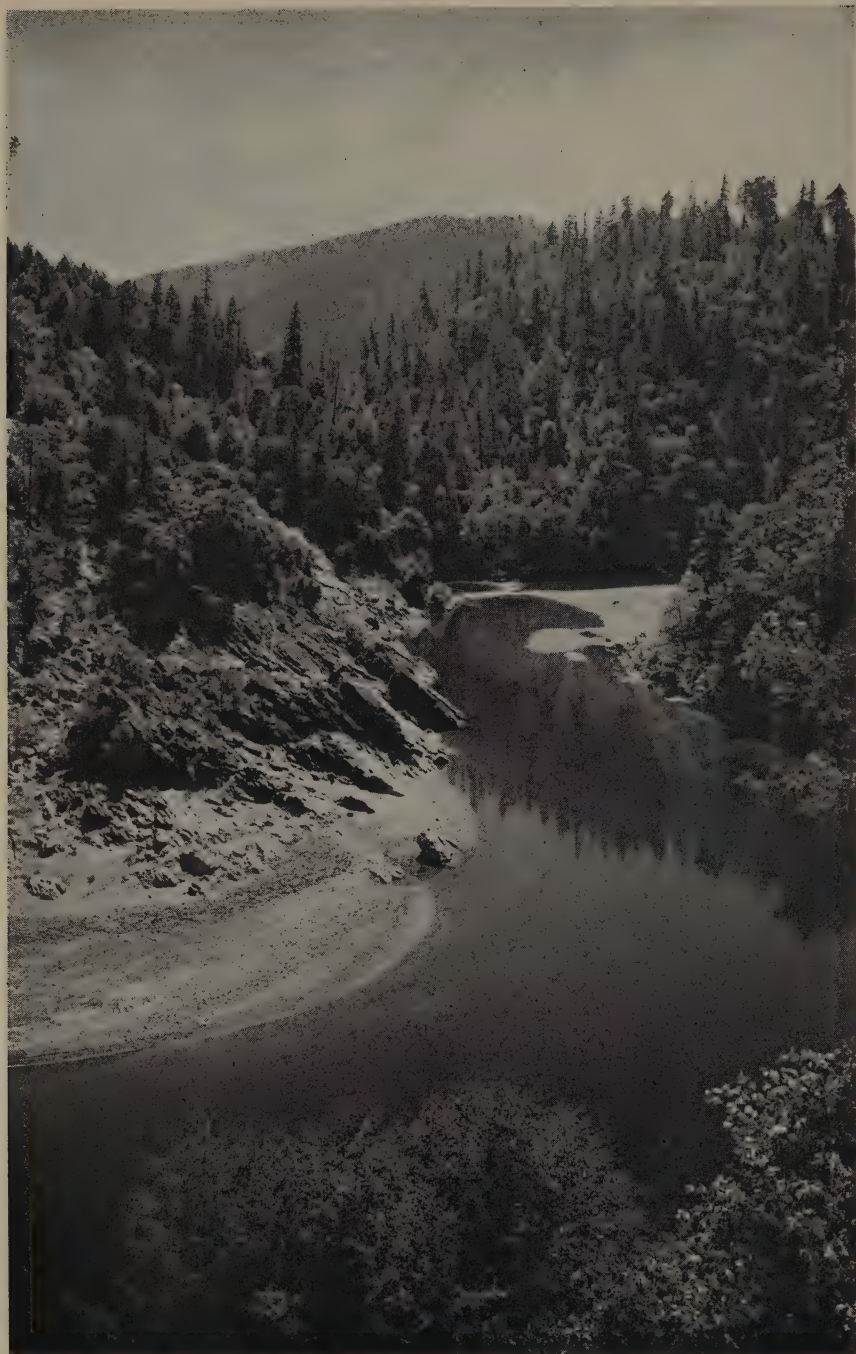
War Damage Claims

The preparation of claims filed under provisions of the Defense Highway Act of 1941 was completed during the year, although all claims were not yet paid by the Federal Government as of that date.

The status of war damage claims is as follows:

Total amount of claims filed	\$2,288,571.15
Total payments received by 6/30/50	\$969,020.34
Payments pending	818,276.71
Disallowance for betterment and other ineligible items	\$501,274.10

The return of \$1,787,000 represents some 78 percent of the amount claimed.



VIEW OF TRINITY RIVER from U. S. 299 near Willow Creek

MATERIALS AND RESEARCH

The routine operations of the materials and research laboratory, involving approximately 150,000 materials tests and analyses per year, were carried on during the year as in the past. The total volume of testing keeps pace with expanding state highway construction and maintenance operations.

In addition to this routine work, numerous deep foundation borings and studies have been conducted, not only in connection with state highway work generally, but for the State Division of Architecture in connection with major state building construction. These outside investigations include the Education, Motor Vehicle and Printing Division Buildings in Sacramento, as well as the new State Fair and new State College sites in Sacramento and institution buildings in different parts of the State.

Borings were made to determine the nature of the foundation materials and depth to bedrock at the site of the proposed World Trade Center adjacent to the Ferry Building in San Francisco Harbor.

Other major foundation investigations and geological surveys on state highway work include the proposed new location of the Bay Shore Freeway in the vicinity of Sierra Point south of San Francisco; relocation of the highway at the proposed Lexington Dam near Los Gatos and a relocation of the highway in the vicinity of the proposed Cachuma Dam near Santa Barbara, all of which were major studies.

During the fiscal year ending June 30, 1950, the department drilling crews completed the installation of eight horizontal drainage systems at various slide and slipout areas in the State. A total of 103 drains were constructed for an aggregate length of 12,842 feet. Approximately \$63,000 was expended for the work during this period. Sixty-two percent of this work was accomplished on new highway construction projects, 22 percent was classified as maintenance of existing highways, and 16 percent was conducted for other state agencies.

Studies to develop new and improved specifications and equipment have continued. This has involved considerable work in fields comparatively new for the laboratory, such as miscellaneous maintenance equipment, as well as studies in the development of automatic traffic counting and weighing devices.

In much of this specialized work it has been necessary to develop special test equipment, operations and procedure, as the field is not adequately covered by standard equipment and methods of test.

As in the past, the laboratory has worked closely with the various branches of the Institute of Transportation and Traffic Engineering of the University of California and holds membership on a number of committees operating on projects set up for joint study by the university and the Division of Highways.

In the field of steel fabrication inspection, the department has handled the shop fabrication of major state buildings such as the extension to the State Capitol which involved 4,555,000 pounds of structural steel in the framework. The above type of work for the Division of Architecture has been in addition to the regular shop inspection of similar work for the bridge department.

Construction of the continuous reinforced concrete pavement test section near Fairfield, Solano County, was completed. This construction contains a large number of stress-strain and other test devices designed to measure the performance of the pavement slab under variable climatic and age conditions. Measurements to this end are being made at periodic intervals. It is expected that the first report on this project will be issued sometime during the fall of 1950, after the pavement, which was constructed during June, 1949, has passed through one complete year time and weather cycle.

Observations have been continued on other pavement research projects, and cooperation has continued with the Portland Cement Association in the study of the "Long Time Performance of Cement in Concrete," particularly the project in Sacramento where a study is being made of the relative durability of different type cements to the destructive salts (sodium and magnesium sulphate) in alkali soils and sea water.

Studies have been continued on the effects of air entraining agents and calcium chloride in concrete using all California brands of cement.

Participation has continued in the work of the American Society for Testing Materials Committee C-1, Sponsoring Committee on Blended Cement, as well as direction of a symposium of the same topic at the 1949 fall meeting of the ASTM in San Francisco.

Similar field performance studies have been carried on in the bituminous pavement field and the department is actively participating in the joint committee engaged in studying triaxial methods of testing bituminous mixtures for stability as well as the application of the same principles to the determination of the stability of untreated foundation soils.

Studies have been continued to determine the suitability of limes of different grades in the stabilizing of subgrades and bases.

The development of improved and more economical traffic line paints continues to occupy considerable attention of the chemical section.

EQUIPMENT

The equipment department of the Division of Highways is a self-supporting unit established to administer, maintain, and account for all of the automotive, construction, and maintenance equipment owned by the division. Its chief income is derived from the rental of this equipment to other departments and districts of the Division of Highways. By this means, all mechanical and motor vehicle equipment is efficiently and competently serviced and maintained, and the full proportionate cost of purchase, upkeep, and replacement of each piece of equipment is properly charged to each particular function or project on which it may be used.

Under the present organization the Equipment Engineer supervises all functions of the department and reports directly to the Assistant State Highway Engineer in charge of operations. The main shop in Sacramento handles not only the cars of headquarters and some equipment for other state agencies, but also cares for cars, trucks, and maintenance equipment of District X at Stockton, and District III at Marysville.

There are 10 additional shops throughout the State which serve the other nine districts and the San Francisco-Oakland Bay Bridge. Each shop is in charge of an equipment superintendent who is responsible for the maintenance and supervision of all highway equipment in his territory and who reports to the Equipment Engineer.

The Headquarters Shop in Sacramento is equipped for construction of special machinery for highway work, such as paint striping machines, oil distributors, boring rigs, and special equipment which may be requested by other state agencies.

To properly accommodate the productive force at Headquarters Shop, 12,261 square feet of additional floor space has been completed for use in truck repairing. About 2,800 square feet of floor space has also been constructed or added to the previously existing administrative structure at Sacramento. Improvements approximating 50,000 square feet floor space are now in the course of being designed, or constructed, at equipment shops throughout the State. The new truck shop building at Headquarters Shop is a thoroughly modern, Class "A" type of structure and is equipped to do any reasonable motor vehicle repairs. The additional office space here in Sacramento is also a Class "A" type of building.

The 50,000 square feet of floor space in equipment outside headquarters, mentioned above, includes the replacement of buildings recently destroyed by fire at Shop 2, Redding. When completed, these new units will be of Class "A."



Division of Highways TRUCK REPAIR SHOP at Sacramento



Interior view shows SNOW EQUIPMENT BEING READIED FOR WINTER MAINTENANCE. Note entire floor space available for repair work

The design of the new truck repair shop at Headquarters in Sacramento, together with plans in preparation for new shop office buildings at Shops 2 and 4, has led to the adoption of standard designs for both shop and office buildings. These standards may be varied in size to fill the requirements of the different shops without undue work and expense in redesigning for each location.

Emergency requirements for equipment which cannot be temporarily met through use of highway-owned units, are usually filled by renting from outside sources. The rates paid for this outside equipment are, in practically all cases, considerably higher than those charged for state-owned equipment.

A standardization committee has been working on improvements to certain equipment or parts which are in frequent use. As the Equipment Department has over 5,300 separate pieces, representing a capital investment of nearly \$14,000,000, with approximately 200 units having similar attachments, such a standardization is most desirable. It should be kept in mind that many of the manufacturers of construction equipment involved, question the changes as being of general value, principally for the reason such changes would not apply to equipment serving parts of the country where requirements differ widely from those in this State.

As of June 30, 1950, rental equipment owned by the Division of Highways was assigned to headquarters, the several districts, and the San Francisco-Oakland Bay Bridge, in accordance with inventory values shown in the accompanying table. The table shows shop, location, square feet of floor space, administration and production force employed and

value of equipment maintained. The amount shown for Headquarters Shop includes the value of relief units used for replacing equipment temporarily disabled at points within reasonable distances from Headquarters Shop.

<i>Shop No.</i>	<i>Location</i>	<i>Personnel</i>	<i>Floor space (square feet)</i>	<i>Inventory value of rental equipment</i>
Hdqts.	Sacramento	156	75,177	\$840,842.80
1	Eureka	36	24,567	1,333,012.32
2	Redding	52	21,108	1,916,900.77
3*	Marysville	8	None	1,180,561.47
4	San Francisco	37	18,040	1,185,982.16
5	San Luis Obispo	26	12,737	809,990.19
6	Fresno	33	16,620	1,179,070.35
7	North Hollywood	64	24,931	1,806,994.54
8	San Bernardino	35	12,321	1,059,466.75
9	Bishop	17	15,776	619,662.51
10*	Stockton	10	None	1,069,549.37
11	San Diego	35	18,045	863,461.43
SF-Oak.	Bay Bridge, Oakland	†	4,618	131,973.69
				<hr/> \$13,997,468.35

* Equipment repair at Headquarters Shop.

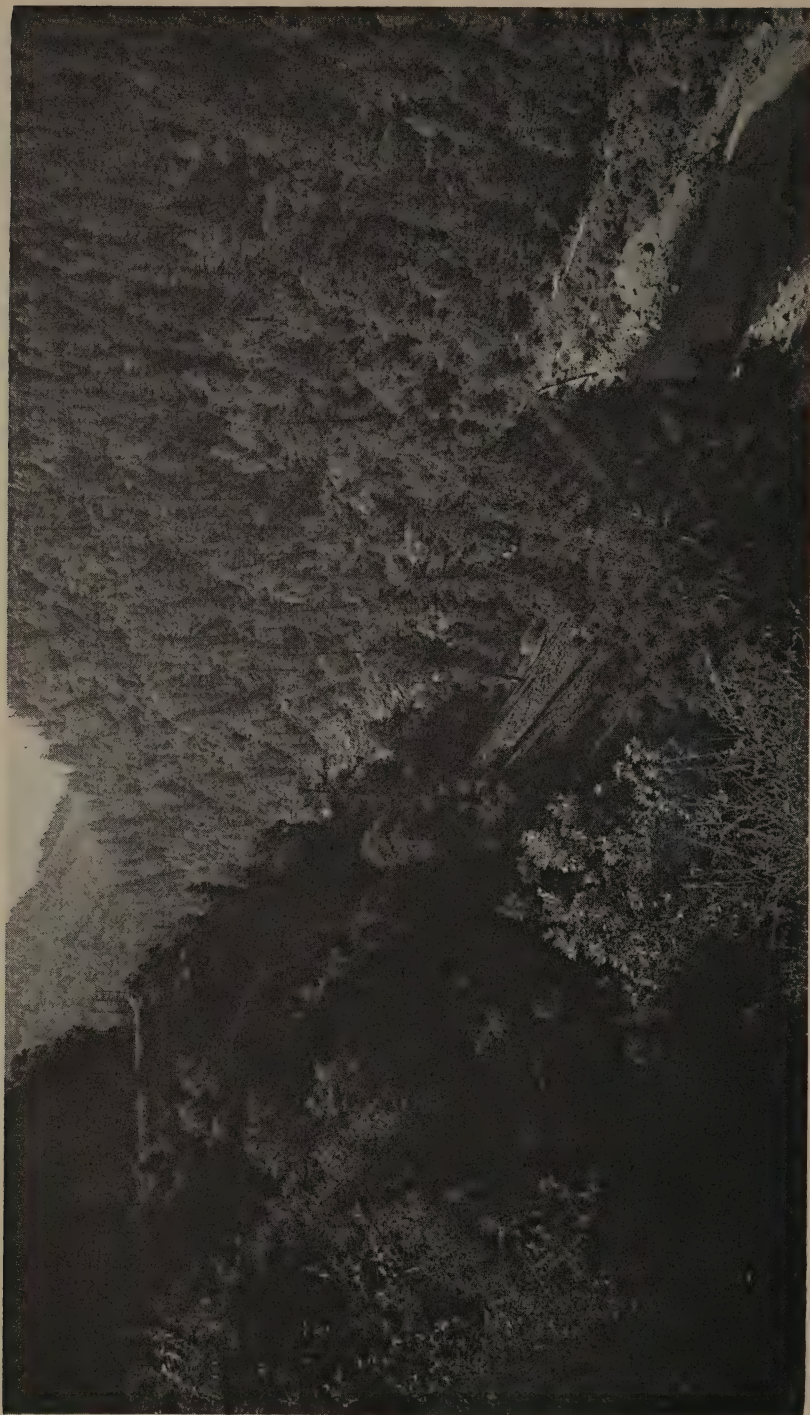
† Shop personnel not under Equipment Department.

As noted in the equipment section of the Third Annual Report, an extensive audit and study was completed in September of 1949, covering the repair and operating costs of the department in connection with the administration, repair costs, and depreciation of all of the divisions equipment. As a result of this study, the present rental system, as approved by the State Highway Engineer, was put into effect as of the first of October, 1949. Subsequent statements of shop operations of the Equipment Department have indicated that the rental rates set up under the new system will return only the approximate amounts for which they were designed. It is anticipated that with the rentals received during the 1950-51 Fiscal Year, a small amount will be available from the rentals, which may be used to reduce the deficit accumulated over the past five years.

The result of the new system of rentals is reflected in the following comparison of operating costs for the year ending June 30, 1949, and the current year ending June 30, 1950:

	<i>Fiscal year ending June 30, 1949</i>	<i>Fiscal year ending June 30, 1950</i>
Equipment repairs	\$1,781,537.86	\$2,022,433.73
Miscellaneous expenses	209,268.40	203,940.38
Administrative expenses	446,221.34	454,615.28
Depreciation reserve	1,335,470.07	1,641,285.57
Total expense	<hr/> \$3,772,497.67	<hr/> \$4,322,274.96
Total income	3,278,645.72	4,359,994.31
Excess expense over income	<hr/> \$493,851.95	
Excess income over expenses		\$37,719.35

It should be noted that the new rental system has tended to reduce the amount of the large operating deficit of the previous years. Considering the variable factors in designing the rental system, such as the



VIEW OF SMITH RIVER CANYON from U. S. 199 near Hazel Summit

market cost of new equipment and the amounts received from the sale of retired equipment, it is not anticipated that any major adjustments can be made in the present rental schedule for some time.

In an effort to obtain a higher salvage value for equipment being replaced and to facilitate more prompt delivery of new units, all major units of rental equipment are now being turned in as part payment on new equipment purchased. This procedure has not been in force for a sufficient period to definitely determine its value. So far it is questionable as to whether it accomplishes the objective, since, while bids received on units turned in are invariably higher than would be obtained through outright sale, prices required for payment of new units appear to be above those which would be charged for equipment of similar type, provided no consideration were to be given on the "turn-in" transaction. This is further explained when it is remembered that no discount from established list prices is ordinarily allowed when "turned-in" equipment has been considered as part payment. There are other objectionable features about the procedure, such as definite loss of earnings while the old equipment is being tied up for inspection by prospective purchasers. The matter is being given further study and data are being compiled.

In addition to equipment repair work for District III located at Marysville and District X located at Stockton, Headquarters Shop forces are also occupied with major repairs and other construction work for those districts whose mechanical facilities are not adapted to certain special operations, such as heavy mechanical and structural repairs to draw and lift span bridges over navigable streams, the larger steel bridges, and river ferries.

Both the administrative and productive forces of all shops are placed at the disposal of other state departments upon request for assistance in selecting equipment suitable to their needs, and in repairing units that may be under control of those departments.



CABRILLO FREEWAY, U. S. 395, at entrance to Balboa Park in the City of San Diego showing afternoon traffic

ADMINISTRATION

In the organizational set-up of the Division of Highways the scope of directional authority of the Assistant State Highway Engineer, Administration, includes the following phases of activity:

- Office Engineer's functions,
- County and county cooperative projects,
- City and city cooperative projects, and
- Departmental stores.

As noted in prior reports, the Office Engineer supervises the administration of federal-aid apportionments, except that federal-aid secondary apportionments are processed under county and county cooperative projects. Recommendations of bid ratings for contractors who wish to be prequalified to bid on state highway construction are made by the Office Engineer. Other Office Engineer's functions include: engineering budget control and preparation of financial, route adoption and freeway declaration votes for action by the Highway Commission; control of administrative accounts; specification preparation and final correlation of contract plans and specifications; advertising and opening of bids and preparation of contracts; processing of progress and final estimates on contracts; engineering review and preparation of condemnation resolutions, abandonment and relinquishment votes for commission action; blue printing and reproduction for all Headquarters' offices; the department's general files; compilation and analysis of construction cost data and other statistical information; and preparation and publication of departmental reports.

The county and county cooperative projects' function covers administration of that portion of federal-aid secondary apportionments allocated to the counties of California for improvement to county roads located on the Federal-aid Secondary Highway System.

The city and city cooperative function involves administration by the Division of Highways of the five-eighths of a cent of gas tax funds apportioned to the cities for construction and maintenance of major city streets under provisions of the Collier-Burns Highway Act.

Departmental stores is an administrative function under which are formulated recommendations for the purchase of supplies and equipment, other than road equipment. Warehousing and internal distribution of such supplies for the entire Division of Highways is the duty of the Stores Section.

Construction Cost Index

The compilation and evaluation of data relative to the trend of highway construction costs has been continued by the Office Engineer's Section. The California highway construction cost index, using 1940 as the

base year with a value of 100, is compiled each quarter and reflects the rapid changes in highway construction costs that have taken place in the last year.

Following is a tabulation of the California highway construction cost index:

<i>Year</i>	<i>Cost index</i>	<i>Year</i>	<i>Cost index</i>
1940 -----	100.0	1947 (2d half) -----	204.1
1941 -----	125.0	1948 (1st half) -----	216.8
1942 -----	157.5	1948 (2d half) -----	216.4
1943 -----	156.4	1949 (1st quarter) -----	200.4
1944 -----	177.8	1949 (2d quarter) -----	195.7
1945 -----	179.5	1949 (3d quarter) -----	187.9
1946 (1st half) -----	166.1	1949 (4th quarter) -----	178.8
1946 (2d half) -----	193.2	1950 (1st quarter) -----	160.0
1947 (1st half) -----	202.5	1950 (2d quarter) -----	180.0
		1950 (3d quarter) -----	189.2

The downward trend in highway costs which had continued since 1948 was sharply reversed in 1950 when costs rose 12.5 percent from the first to the second quarter and again rose 5.1 percent between the second and third quarters. The inflationary economic forces that caused this increase, the building boom, the Korean War and the defense program, continue to influence highway costs and will probably cause further increases.

Prequalification of Contractors

California statutes require that all contractors desiring to bid on state highway contracts estimated to cost \$15,000 or more shall be prequalified by the department on the basis of their financial condition and experience and be given a maximum rating which limits their bidding capacity.

During the fiscal year, the total number of contractors prequalified to bid on state highway construction increased from 639 on July 1, 1949, to 674 on June 30, 1950. The combined bidding capacity of these 674 prequalified contractors is approximately \$1,000,000,000. In determining this total bidding capacity a maximum of \$20,000,000 was established, that is, ratings in excess of \$20,000,000 were entered at the 20,000,000-figure.

The following tabulation is the number of contractors prequalified by the Division of Highways on June 30th arranged by several brackets of bid ratings.

\$1,000,000 and over -----	195
250,000 to \$1,000,000 -----	419
125,000 to 250,000 -----	503
50,000 to 125,000 -----	659
up to 50,000 -----	674

FEDERAL AID

With one exception, all contracts which were partially financed with federal-aid primary and urban funds provided by the Federal Aid Highway Act of 1944, were completed before the end of the Fiscal Year 1950. This remaining contract, estimated to cost \$1,729,000, involved federal-aid urban funds in the amount of \$666,561.

The status of the program obligating federal-aid for improvements on the Secondary Federal Aid System is discussed further in this report under "Federal Secondary Roads."

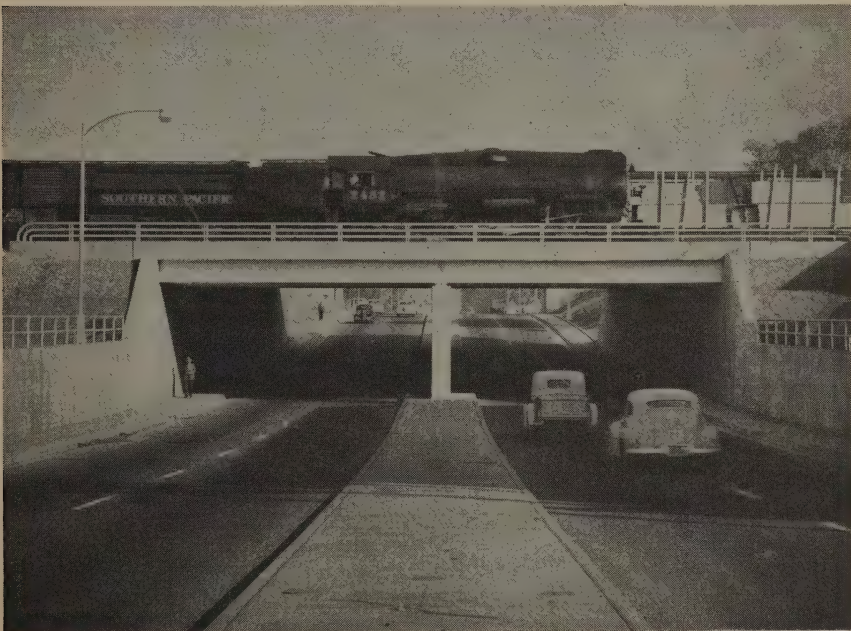
On September 8, 1949, California was apportioned its share of the second year of federal-aid authorized by the Federal Aid Highway Act of 1948. This money was available for the fiscal year ending June 30, 1950, and is the final apportionment authorized by the 1948 act. The amounts for the three classes of federal-aid projects so apportioned are as follows:

Primary federal-aid projects	\$8,037,278
Urban highway projects	7,216,292
Secondary federal-aid projects	4,602,788

This provides a total of \$19,856,358 for the three classes of projects.

This sum, with the amount previously apportioned to California by the 1948 Act, provided a grand total of \$39,693,601 in federal funds for highway construction for a two-year period.

Programs designed to obligate the second year's apportionment for primary and urban federal-aid projects have been submitted to and



STEEL GIRDER STRUCTURE carrying tracks of Southern Pacific Railroad over 12th Street at the north entrance to City of Sacramento, built with city, county and federal funds



BAYSHORE FREEWAY, U. S. 101 Bypass, through South San Francisco
with metal barrier in central division strip

approved by the Bureau of Public Roads. The proposed disposition of federal funds for secondary federal-aid projects is discussed further in the report under "Federal Secondary Roads."

The program for primary federal-aid projects, utilizing the entire two year's apportionment of \$16,063,091 of primary funds authorized by the 1948 act, includes 54 contracts and two planning survey projects, with a total cost of \$35,269,650. By the end of the fiscal year, work on 36 of these contracts were either completed or under way at a cost of \$22,659,300 including federal funds in the amount of \$11,477,700. The remaining programmed projects were scheduled for early advertisement.

The program for federal-aid urban projects, designed to obligate the entire two year's apportionment of \$14,432,584 of urban funds authorized by the 1948 act, includes 26 contracts and two planning survey projects, with a total cost of \$30,868,200. Work was either completed or underway at the end of the fiscal year on 15 of these contracts at a cost of \$16,284,900, including federal funds in the amount of \$8,015,650. The remaining programmed projects were scheduled for early advertisement.

With the last appropriation made to the states in 1949 under current federal-aid laws, the Congress of the United States, recognizing its responsibility in assisting the states in highway construction, has enacted federal legislation for continuing federal-aid for a two-year period.



Aerial view of the FREEWAY CONSTRUCTED THROUGH SANTA ROSA
on U. S. 101, looking north

APPORTIONMENT OF FEDERAL FUNDS TO CALIFORNIA

Fiscal year ending	Primary Federal Aid	Urban Federal Aid	Emergency Advance Fund	Emergency Relief and Construction Fund	U. S. Public Works Fund	1935 Public Works High- way Fund	Works Program Fund	
							Highways	Grade crossing
June 30, 1917	\$151,063.92							
June 30, 1918	302,157.84							
June 30, 1919	2,860,415.58							
June 30, 1920	2,896,071.77							
June 30, 1921	3,094,675.51							
June 30, 1922	2,462,098.53							
June 30, 1923	1,641,300.02							
June 30, 1924	2,140,463.16							
June 30, 1925	2,487,157.78							
June 30, 1926	2,472,636.00							
June 30, 1927	2,484,706.00							
June 30, 1928	2,483,437.00							
June 30, 1929	2,486,415.00							
June 30, 1930	2,495,345.00							
June 30, 1931	4,179,831.00							
August 31, 1931			\$3,008,827.35					
June 30, 1932	4,181,212.00			\$4,667,188.00	\$15,607,354.00			
June 30, 1933	4,140,910.53							
Available on and after July 1, 1933.								
June 30, 1934						\$7,932,206.00		
June 30, 1935								
June 30, 1936	4,756,959.00						\$7,747,928.00	\$7,486,362.00
June 30, 1937	4,751,712.00							
Floods of 1937 and 1938.								
June 30, 1938	4,858,220.00							
June 30, 1939	4,735,268.00							
Floods of 1940								
June 30, 1940	3,814,812.00							
June 30, 1941	4,382,966.00							
Available on and after November 19, 1941.								
Available on and after December 1, 1941.								
June 30, 1942	3,982,125.00							
June 30, 1943	3,989,896.00							
June 30, 1946	9,018,749.00	\$8,122,233.00						
June 30, 1947	9,017,519.00	8,122,233.00						
June 30, 1948	8,897,891.00	8,018,102.00						
June 30, 1950	8,025,813.00	7,216,292.00						
June 30, 1951	8,037,278.00	7,216,292.00						
Totals	\$120,309,173.53	\$38,695,152.00	\$3,008,827.35	\$4,667,188.00	\$15,607,354.00	\$7,932,206.00	\$7,747,928.00	\$7,486,362.00

APPORTIONMENT OF FEDERAL FUNDS TO CALIFORNIA—Continued

Fiscal year ending	Secondary Federal Aid	Federal Aid Grade Cross- ing Fund	Emergency Relief High- way Fund	Strategic Network Fund	Advance Engineering Fund	Federal Lands Fund under state supervision	Access Road Fund	Flight Strip Fund
June 30, 1917.....								
June 30, 1918.....								
June 30, 1919.....								
June 30, 1920.....								
June 30, 1921.....								
June 30, 1922.....								
June 30, 1923.....								
June 30, 1924.....								
June 30, 1925.....								
June 30, 1926.....								
June 30, 1927.....								
June 30, 1928.....								
June 30, 1929.....								
June 30, 1930.....								
June 30, 1931.....								
August 31, 1931.....								
June 30, 1932.....						\$6,841.99		
June 30, 1933.....								
Available on and after July 1, 1933.....								
June 30, 1934.....						272,369.71		
June 30, 1935.....						232,478.97		
June 30, 1936.....						151,587.59		
June 30, 1937.....								
Floods of 1937 and 1938.....			\$1,644,289.37					
June 30, 1938.....	\$971,644.00	\$1,874,656.00				36,698.89		
June 30, 1939.....	947,054.00	1,825,553.00				191,493.67		
Floods of 1940.....			315,220.63					
June 30, 1940.....	571,229.00	735,256.00				88,940.66		
June 30, 1941.....	571,992.00	1,114,393.00				95,238.00		
Available on and after November 19, 1941.....				\$1,416,133.00			\$35,195,435.11	\$2,245,325.45
Available on and after December 1, 1941.....				997,474.00	\$398,990.00	85,000.46		
June 30, 1942.....	696,872.00	799,099.00						
June 30, 1943.....	698,232.00	798,434.00						
June 30, 1946.....	5,162,254.00							
June 30, 1947.....	5,161,445.00							
June 30, 1948.....	5,092,619.00							
June 30, 1949.....	4,595,138.00							
June 30, 1950.....	4,602,788.00							
June 30, 1951.....								
Totals.....	\$29,071,267.00	\$7,147,361.00	\$1,959,490.00	\$2,413,607.00	\$398,990.00	\$1,160,649.94	\$35,195,435.11	\$2,245,325.45
Grand total.....								\$285,046,316.38

Includes \$182,500 of Federal Housing Authority funds.



PIGEON PASS ROAD, looking east from Benton Avenue toward Redlands, Federal Aid Secondary project, San Bernardino County

COUNTY AND COUNTY COOPERATIVE PROJECTS

Federal Secondary Roads

Division of Highways activities of the last year relating to federal secondary roads continued along lines similar to those set forth in the Third Annual Report.

During the past fiscal year, federal-aid secondary contracts were awarded for 43 projects, which involved the construction of 14 bridges and 123.1 miles of road. The cost of these projects, including engineering, was \$5,279,203. During the same period, 31 road and 11 bridge contracts were completed at a cost of \$7,618,589.

The following is a tabulation of the status of federal-aid secondary projects as of June 30, 1950.

County projects	<i>Length miles</i>	<i>Total cost</i>	<i>F. A. S. and state funds</i>	<i>Other funds</i>
Under contract				
20 roads -----	89.4	\$2,872,672	\$2,327,351	\$545,321
12 bridges -----	---	2,137,097	1,931,168	205,929
	89.4	\$5,009,769	\$4,258,519	\$751,250
Completed				
114 roads -----	611.5	\$18,679,791	\$15,383,793	\$3,295,998
54 bridges -----	---	6,325,116	5,073,246	1,251,870
	611.5	\$25,004,907	\$20,457,039	\$4,547,868
County subtotals	700.9	\$30,014,676	\$24,715,558	\$5,299,118
State projects—				
Under contract				
6 roads -----	23.0	\$1,384,400	\$660,000*	\$724,400
0 bridges -----	---	---	---	---
	23.0	\$1,384,400	\$660,000*	\$724,400
Completed				
3 roads -----	13.8	\$1,206,124	\$679,578*	\$526,546
5 bridges -----	2.0	1,511,810	845,388*	666,422
	15.8	\$2,717,934	\$1,524,996*	\$1,192,968
State subtotals	38.8	\$4,102,334	\$2,184,966*	\$1,917,368
Flashing lights				
60 installations ---	---	\$263,342	\$250,810*	\$12,532
Grand totals	739.7	\$34,380,352	\$27,151,334	\$7,229,018

*NOTE: F. A. S. funds only

By the end of the fiscal year, federal-aid secondary programs had been submitted to the Bureau of Public Roads, having an estimated total cost of \$46,870,656 and involving improvement to some 995 miles of road.

The apportionment to California for federal-aid secondary projects for the second fiscal year of the Federal Aid Highway Act of 1948 totaled \$4,602,788. On May 23, 1949, the State Senate, and on June 23, 1949, the Assembly, adopted Senate Concurrent Resolution No. 62, which authorized the allocation of 87½ percent of secondary funds to the counties for expenditure on county roads in the Federal-aid Secondary System. The allocation totaled \$4,027,439, and was distributed among the counties on the same basis as allocated to the State, namely on the average of rural population, area and mileage of rural post and star routes, with four



Aerial view of ALVARADO CANYON ROAD looking easterly, San Diego State College upper right. Federal Aid Secondary project in San Diego County

counties receiving a minimum of one-half of 1 percent. No matching funds were provided for the secondary allocation, and it was required that the county must provide these funds.

During the past year, minor revisions were made in the Federal-aid Secondary System, and as of June 30, 1950, this system, as approved by the Commissioner of Public Roads, consisted of 9,147.6 miles, of which 5,496.1 miles are on county roads and 3,651.5 miles are on state highways. This represents an increase of 162.2 miles over that reported a year ago.

In compliance with the provisions of Section 2121 of the Streets and Highways Code, many of the counties of the State revised their maintained systems in May of 1950. The total increase of maintained county roads as approved by the Division of Highways was 554.8 miles, and on June 30, 1950, the Director of Public Works certified to the State Controller that the county maintained road system consisted of 66,381.0 miles.

The county primary road system was revised in several counties during the year, and as approved June 30, 1950, consisted of 19,374.6 miles. A county is permitted to revise its mileage of primary roads from time to time, but at no time may the mileage be in excess of 50 percent of the maintained mileage in that county.

The State continued the policy, initiated during the preceding fiscal year, of offering the services of the Highway Planning Survey to the counties for the purpose of making inventories in the county road system. It is required that the county provide \$2.50 per maintained mile to cover its share of the cost, it being anticipated that the balance of the cost will be paid from federal-aid secondary funds set up for highway planning purposes. To date, 14 counties have expressed a desire to participate in the program.

Joint Highway Districts

Under the provisions of the Joint Highway District Act, 27 joint highway districts have been organized in California.

Section 4 of the Collier-Burns Highway Act of 1947 stipulates that not more than one-half of 1 percent of funds allocated to state highways in each county group (north and south) may be used for state aid in joint highway districts.

At this time, four joint highway districts are active. The present status of these four districts is as follows:

Joint Highway District No. 9: This joint highway district was organized May 28, 1928, to provide for the improvement of the Ocean Shore Highway in Santa Cruz, San Mateo and San Francisco Counties. During the 1931 Session of the Legislature, this route was taken into the State Highway System as State Highway 56.

During the past year, a contract was completed between Half Moon Bay and Montara at a cost of \$450,000. Contracts were awarded for work as follows: between 1.5 and 2.5 miles north of Half Moon Bay, at Frenchman's Creek, grading and surfacing, at an estimated cost of \$108,000. Between one mile south and one-half mile north of Lobitos, grading and surfacing, at an estimated cost of \$164,000. Between 2.3 and 1.5 miles south of Davenport, at Respini Creek, grading and surfacing, at an estimated cost of \$126,000.



BRIDGE ACROSS KAWEAH RIVER, Federal Aid Secondary project,
southwest of Woodlake, Tulare County

Joint Highway District No. 10: This joint highway district was organized September 15, 1928, by San Francisco and San Mateo Counties, to cover construction of Junipero Serra Boulevard Extension between San Francisco and Burlingame. Four units have been completed over the years. The State has been contributing an annual payment of \$47,500, which represents one-third of the cost, to assist in financing the improvement.

The fifth unit, between Sneath Road and Crystal Springs Road, is under construction at an estimated cost of \$315,000.

Joint Highway District No. 14: This joint highway district was organized December 21, 1929, by Lassen and Modoc Counties. At present, the district is active between Susanville and Adin, which is within the limits of FAS Route 988. There was completed during the fiscal year, a contract between Hayden Hill and Adin, at a cost of \$318,410.15. This was financed as a joint highway district and FAS project.

The last contract to be undertaken by this joint highway district is nearly ready for advertising as this fiscal year closes. The project will improve 12.8 miles of the Susanville-Adin road between Grasshopper Valley Ranch and Hayden Hill, at an estimated cost of \$376,000. It is to be financed as a joint highway district and FAS project, also. Upon

completion of this contract, the counties have agreed to dissolve the joint highway district.

Joint Highway District No. 26: This district was organized September 26, 1938, by Alameda and Contra Costa Counties. The major part of the project is on Mountain Boulevard in the City of Oakland. Under Section 527 of the Collier-Burns Highway Act, the route was taken into the State Highway System as State Route 227, and has since been declared a freeway by the State Highway Commission.

Preliminary engineering is being done under the supervision of the Joint Highway District Engineer.

During the past fiscal year, contracts for two projects were completed at an approximate cost of \$104,000. The improvements consisted of the installation of drainage structures at Landvale Road northwesterly of Pinewood Road, and the construction of ramps at the Broadway Terrace Interchange. The contracts were handled by the joint highway district.

As the fiscal year ended, a major project was nearly ready for advertising between Broadway Terrace and Bruns Drive at an estimated cost of \$1,768,122.56, including rights of way. This improvement will develop 1.14 miles of Route 227 to four-lane divided freeway standards. This contract will also be handled by the joint highway district.



South approach to the MOKELUMNE RIVER BRIDGE at Benson's Ferry,
Federal Aid Secondary project, San Joaquin County



INTERSECTION MORENO BOULEVARD WITH CAMINO DEL RIO, Federal Aid Secondary project in San Diego County

CITY AND CITY COOPERATIVE PROJECTS

The amount of \$18,569,099.95 of the gasoline tax was apportioned to the 305 incorporated cities in California for expenditure upon city streets under the provisions of the Collier-Burns Highway Act for the Fiscal Year ending June 30, 1950. This amount added to the amount remaining unexpended from the Fiscal Year 1949 and carried forward for expenditure on city streets into Fiscal Year 1950 made a total of \$25,197,903.26 available. Of this amount the cities budgeted \$19,817,302.12 leaving \$5,380,601.14 unbudgeted to be carried over for budgeting in the 1951 Fiscal Year. The apportionment for the Fiscal Year 1950 was slightly more than \$1,000,000 greater than for the Fiscal Year 1949 but due to the decrease in the carry-over from the preceding year the actual amount available for budgeting was \$4,700,000 less in the Fiscal Year 1950 than in the Fiscal Year 1949.

Although there has been no apportionment of the amount derived from the one-fourth cent per gallon tax on gasoline for expenditure on state highway routes within cities since December 31, 1947, the effective date of the repeal of the allocation by the Collier-Burns Highway Act, there still remains \$2,856,000 of this money unexpended on June 30, 1950. This figure is to be expended, \$2,521,000 by cities themselves and \$335,000 by the department under agreement with the cities involved. As pointed out in the annual report last year, by far the greatest amount of this unexpended balance is in the two metropolitan districts of San Francisco and Los Angeles. Seventy-three percent of the unexpended balance is in the San Francisco district, 22 percent is in the Los Angeles district, and the remaining 5 percent is spread among six other districts. In four districts all of the one-fourth cent for state highways has been expended.

Population

The population of the incorporated cities of California increased 42,431 during the fiscal year ending June 30, 1950, as recorded for purposes of apportioning the gas tax revenue, making a total urban population on June 30, 1950, of 6,904,734. This increase is less than half of the increase during the preceding fiscal year and the reduction is due principally to the decline in the growth of cities as determined by special federal census. During this period 348 tracts of unincorporated territory, having a population of 22,494, determined by multiplying the number of registered electors residing in the territory by three, were annexed by cities. During the same period three tracts were excluded from incorporated territory. In one case the territory excluded was annexed by an adjacent city and resulted merely in an exchange of population between the two cities. In another exclusion the territory was uninhabited and it was only in the third exclusion that a decrease in the total population resulted. This decrease has been taken into consideration in the above figures.

In spite of the fact that 1950 is the year for the regular decennial federal census, nine cities had special federal counts made since July 1, 1949, resulting in recorded increase in population of 19,937.

The act authorizing the determination of population of cities, by means of a special federal census, for purposes of apportioning gas tax revenue expires upon official publication of the 1950 decennial census.



Section of ROSEVILLE FREEWAY showing underpass which carries U. S. 99 under the tracks of the Southern Pacific Yards at Roseville

Since the original enactment in 1943, 224 cities have had special census taken resulting in an increase in recorded population of those 224 cities of 1,713,406.

The act authorizing the determination of the population by special federal census was based on the premise that at the end of World War II the population would return to its prewar level. Preliminary figures of the 1950 census returns disclose that the population of the war boom cities has declined relatively little from the wartime peak. Outside of Vallejo which lost one-half and Alameda which lost one-third, the population of the other war boom cities varies from a loss of 25 percent in Oakland to an increase of 8 percent in Burbank and 40 percent in Chula Vista.

The increase in the activity of the military as well as in the ship-building and airplane industries in California will doubtless bring new dislocations of population should the Korean War last for any appreciable length of time. With the present act authorizing the determination of the population of cities by special federal census expiring this year, there will be no means of determining the population of those cities affected by a sudden large increase in population.

According to preliminary figures of the decennial federal census the total population in incorporated cities in California is approximately 7,400,000. This is an increase of 200,000 or 3 percent over the population now being used for apportionment purposes. As a result of this increase the per capita apportionment will be 3 percent less when the new population figures go into effect than with the population figures now being

used. This decrease will be more than offset, however, by an increase of 4 percent in the estimated revenue. While the total increase in the population in incorporated cities is very slight, the population of the individual cities varies from a decrease of 50 percent to an increase of 100 percent from the population used for purposes of apportionment of gas tax revenue.

STORES—SERVICE AND SUPPLIES

Since the institution of the Highway Stores Department considerable emphasis has been placed on preparing specifications for purchasing commodities and also on providing the means for enforcing compliance with specifications when the material is delivered. Although these methods have long been in use for procuring construction materials, such as asphalt, rock, cement, and steel, until recently they have not been used for the numerous small commodities such as hand tools, office supplies, blueprint papers, furniture, and equipment accessories. These numerous items were formerly procured in small quantities for any one destination and the numerous individuals receiving such goods were not conversant with their specifications and quality. As a consequence purchases were made on price rather than quality basis and vendors became accustomed to furnishing low quality goods, often substituting a lower quality than that specified.



LOADING PLATFORM AND LOADING EQUIPMENT used by stores department

Under stores operations, these numerous items are received at the warehouse where they are checked in detail for compliance with specifications. Distribution is then made from the warehouse to the numerous destinations. Even the vendors admit that merchandise being delivered under the department's specifications is generally of higher quality than they had been accustomed to supply on state purchase orders.

Specifications have been prepared on about 10 percent of the warehouse items. In many instances preparation of such specifications require considerable research, field, and laboratory studies, but the resulting improved manufacturer's product more than compensates for the effort. In some cases whole classes of products, such as those requiring abrasion resistant steels, broom fibers, and sign materials, are under continued observation and test.

The number of items stocked presently at both the northern and southern warehouses is 4,932, which is an increase of 632 items over the preceding year.

Following is a tabulation of stores business for the fiscal year July 1, 1949 to June 30, 1950:

Direct purchases -----	\$7,300,000
Warehouse purchases -----	1,157,243
Warehouse disbursements -----	1,091,858
Inventory as of June 30, 1950:	
District accounts 137 -----	\$831,172
Warehouse accounts 237 and 337 -----	1,152,723
Processing accounts -----	36,283
Total -----	\$2,020,178

During the year stores has taken over the following additional functions:

Inventory of nonrental equipment representing -----	\$3,750,000
Preparing budget of new nonrental equipment involving -----	400,000
Maintenance of Public Works Building involving a total annual expenditure of -----	120,800

Several new procedures were placed in effect during the year as a result of studies and research. Some of these are as follows:

Substitution of a paper container for the metal container, which was long in use for shipping concrete samples to the Laboratory, resulted in a much more satisfactory handling arrangement and a monetary savings of about \$2,000 a year in shipping costs.

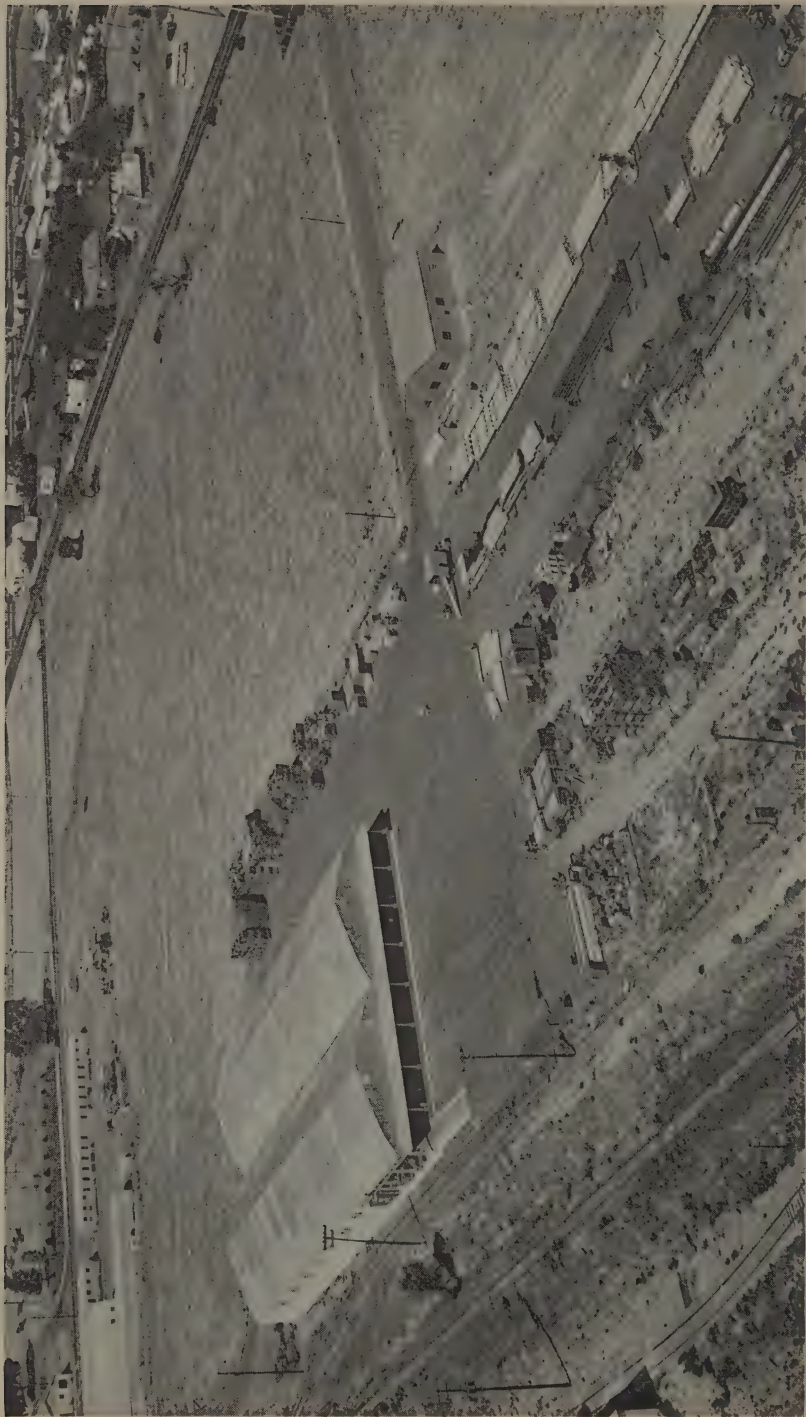
Arrangements were made to ship practically all material samples to the Laboratory by truck common carriers in lieu of express shipments as in the past. This change has resulted in a savings of approximately \$15,000 a year.

The portable base and standard for "Men and Equipment Working" signs has been redesigned at a 30 percent savings or \$620 per year. The new base will withstand a wind of 35 miles per hour, whereas the old base would blow over in a 15 mile wind.

The adoption of definite specifications for woven tapes has resulted in a 70 percent increase in the life of the tape and in a savings of about \$2,700 per year in the cost of this item.



FORK LIFT TRUCK stacking H piling at Sacramento warehouse



Aerial view of STORES WAREHOUSE at Sacramento

Since the institution of the Stores Department, the following are some of the advantages accrued to the State:

Warehouse operations have effected a decrease of 7650 purchase orders annually or 33.6 percent, by reason of large scale buying. The issuance of a purchase order and subsequent distribution of charges, payment of the bills etc., is estimated to cost the State an average of \$5 each, and indicates a net savings to the State of \$38,250 per year. The decrease in purchase orders took place during an expansion period when highway purchases should have normally increased.

A typical example of savings due to large scale buying is most apparent in the case of sheet metal.

For maintenance purposes sheet metal is purchased in numerous sizes and weights and exact requirements may often be picked up locally. For this reason no serious attempt had been made to carry large stocks of sheet metal, but during the year, 107,000 pounds of sheet metal was purchased for a specific purpose at a price of \$0.0555 per pound. In contrast to this, a total of 182,000 pounds, purchased for the districts, in numerous small quantities at various locations averaged \$0.0967 per pound.

Inventories amounting to \$105,000 of obsolete and damaged items scattered throughout the State were sold or otherwise disposed of during the year. Some of these items dated back to 1912 when the Division of Highways was formed, indicating a tendency to hoard against a "rainy day," but which, in fact, gave rise to a definite storage problem as well as placing a false valuation on inventory. It is hoped that the present methods of continuing stock supervision will keep this tendency to a minimum.



Aerial view of SANTA CRUZ FREEWAY, S. R. 1, looking southerly toward Aptos. Capitola interchange in foreground. Monterey bay upper right

PLANNING

Under the supervision of the Assistant State Highway Engineer, Planning, are Headquarters' sections covering budget, advance planning, design, traffic, the state-wide highway planning survey, and public and employee safety.

Following are reports on these phases of state highway work for the past fiscal year.

BUDGET

No major changes in the functioning of the Budget Section were made during the 1949-50 Fiscal Year. The primary task remains that of preparation of the annual budget for the Division of Highways for presentation by the State Highway Engineer through the Director of Public Works to the California Highway Commission for its consideration; and when and as approved by the commission to exercise those controls necessary to assure adherence to its provisions.

Problem of Budget Preparation

While the 1949-50 Fiscal Year just completed was but the third year under the Collier-Burns Act, the problem of budget preparation has required more than ordinary study and detailed consideration. This arises from the fact that the division is at this time confronted with the problem of presenting a budget covering the 1951-52 Fiscal Year, which year marks the end of the first of the three five-year periods established under this act. The statutory provisions, known as the "Mayo Amendment," requires that there shall be a definite minimum percentage allocation of state highway construction funds to each of the several counties. The provision does not apply to each year separately, but is specific in its requirement that the minimum allocations shall be met for the five-year period as a whole. For this reason, particular care must be taken to assure beyond question that in the budget for the concluding year of the five-year period ample provisions have been made to meet the required minimum allocations for each and every county.

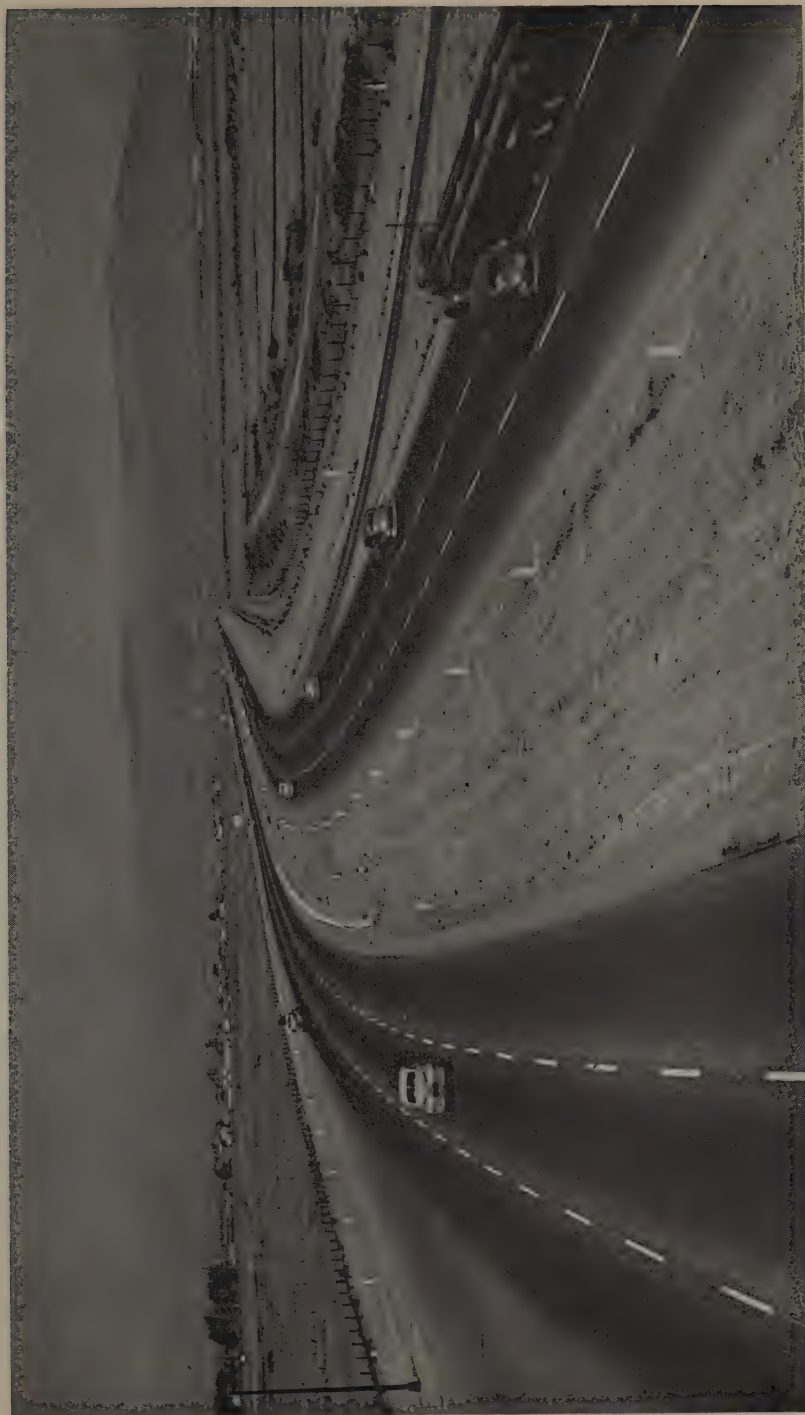
In order that sufficient time might be had for thorough and unhurried review of the construction program for the 1951-52 Fiscal Year, the time for preliminary draft of the detailed budget was set approximately six months earlier than has heretofore been the practice. This procedure has many advantages and will in all probability be followed in preparing future programs.

Sources of Revenue

The chief sources of state highway revenue remain the same, namely: gasoline tax, motor vehicle fees, use fuel tax, transportation tax, and federal aid. The steady rise in population, coupled with the increased



BAYSHORE FREEWAY, U. S. 101 By-pass, showing divided roadways with pedestrian overhead crossing in backgrounds
South San Francisco, San Mateo County



BAYSIDE FREEWAY, U. S. 101 By-pass, divided six-lane construction in San Mateo County between Burlingame and South San Francisco

availability of new motor vehicles, is reflected in larger registration of both passenger cars and commercial vehicles. The over-all increase in gasoline use, while appreciable, is not at the same rate as the increase in registration. This is to be expected for as the acute shortage in cars is relieved the annual per car consumption of gasoline approaches more nearly the normal annual car use prevailing in prewar years.

Estimated Revenues and Traffic Trends

Due to the fact that state highway revenues, with the exception of federal aid, are derived almost exclusively from taxes on highway use, the main reliance in estimating such revenues continues to be placed upon the traffic trends developed through many years from the regular annual and monthly traffic counts which are kept current by constant analysis. Frequent consultation on expected revenues is also had with those other state departments most concerned; among them being the Department of Motor Vehicles, Board of Equalization, and Department of Finance.

With respect to federal aid, which for many years has provided an appreciable percentage of the total state highway budget, while the Congress did not pass the Federal Aid Act of 1950 until September 7th, nevertheless, estimated federal aid for the 1951-52 Fiscal Year was taken into consideration in the budget preparation, and the actual apportionment figures were used by the time the commission adopted the budget on September 22, 1950.

Buildings and Plants Program

An acute shortage exists in buildings and other plant facilities. Much of the increased personnel necessary to properly conduct the greatly enlarged operations of the Division of Highways must still be cared for in inadequate, temporary, and rented quarters. The chief item of accomplishment in the past year toward improvement of this condition, was the completion and occupancy of the new district office building in San Francisco. Delay in the completion of plans for the district office building in San Bernardino caused postponement of its actual construction and this is now scheduled for the 1950-51 Fiscal Year. Plans were also approved for the enlargement of District III office building in Marysville and for the annex to the Public Works Building in Sacramento. This latter will be partially financed and partially occupied by the Division of Highways. Shop 2 buildings in Redding were destroyed by fire during the year and their reconstruction is now under way.

Close cooperation is being maintained with the Division of Architecture in the programming of new or enlarged office buildings for the remaining districts in the order of their importance and urgency. Arrangements are now being made to acquire a new site and prepare plans for a new building for the district office in San Diego where special urgency exists.



Aerial view of U. S. 40, WESTERLY END OF FAIRFIELD BY-PASS in foreground. In upper portion is new construction between Cordelia Underpass and Ledgewood Creek.

DESIGN

The advantage of preparing plans well in advance of the time of budgeted construction was again demonstrated during the closing phases of the past fiscal year. During that period, a combination of increases in anticipated revenue and savings in budgeted items resulted in an accumulation of funds, which made possible the advancement of a number of needed projects from the 1950-51 Fiscal Year program to the 1949-50 Fiscal Year program.

The completion of plans for earlier construction of this work was made possible by the continuing efforts of design personnel in the districts and headquarters, who are constantly working to the end that designs incorporating the latest refinements in highway planning will be ready for the modernization of highways whenever funds are provided. Every possible effort is being made to streamline and expedite the preparation of plans so as to be at least two years ahead of construction with completed plans. Because of difficult and complex right of way problems that are being continuously encountered and the necessity of being prepared to immediately utilize possible increases in revenue or savings for urgently needed highway improvements, it is considered that a two-year period of advance design is the absolute minimum.

Volume of Work

During the year ending June 30, 1950, plans were completed for 648 miles of highways, estimated to cost \$65,240,000. In addition surveys are in progress and plans underway for construction of over 1,800 miles of highway estimated to cost several times the value of plans completed during the year.

Although the processing of project reports is a function of the planning section, the design section prepares comments and makes recommendations on all projects and participates in project report meetings with all other interested departments. Because of the volume of work, the submission of project reports and the joint review by the various departments has proven of inestimable value in providing a more efficient method of expediting the preparation of budgets and subsequent planning and design.

As a part of the work completed during the year, 209 typical sections were processed, each requiring thorough consideration of the adequacy of the section for the traffic anticipated and to determine that the best materials economically available were selected. Design correlates the comments and recommendations of the several other departments in the processing of typical sections.

Similar study was given to approximately 300 interchange and intersection designs so that the greatest traffic service, consistent with the funds available, might be rendered by the completed project.

The amount of work accomplished and the rapidity with which it has been handled was made possible by the close liaison and cooperation of Headquarters Design with District Design sections. Through frequent contacts of Headquarters Design coordinators with the districts, it has been possible to incorporate into all plans for pending work those design



U. S. 50 BETWEEN DUBLIN AND LIVERMORE, Alameda County

TOP—Narrow highway with attendant traffic congestion

BOTTOM—Typical scene on realigned portion. Acceleration and deceleration lanes and intersection lighting

features proven by traffic investigation to be required for the successful operation of a modern highway facility.

Preparation of a Planning and Design Manual is well advanced and all engineering personnel have been requested to submit recommendations for material which they believe should be included.

Freeways

Although it might appear unnecessary to adopt freeway mileage at a rate faster than such facilities can be built under present revenues, the policy of early adoption has proven sound in controlling the rights of access and informing the public of the State's intention. Rapid increases in the State's population and in the rates of development along practically all state highways make continued advanced adoption of freeways mandatory if future traffic facilities are to be adequate.

Route adoptions and right of way appraisals are also reviewed by the department prior to their approval and release.

Research and Special Studies

The Design Section continued to participate in both conception and planning of experimental research projects during the 1949-50 Fiscal Year.

Currently under contract are two sections involving the construction of diagonal joints designed to produce information on the efficiency of this type of construction in reducing joint distress. Also on one of the contracts is included an experimental section to determine the effect of variable spacing of weakened plane joints of portland cement concrete pavement.

In cooperation with the Traffic Section, the Highway Planning Survey, the Materials and Research Laboratory and the U. S. Bureau of Public Roads, the Design Section is working on the correlation of data to be obtained at loadometer stations and an analysis of materials used in the construction of roads in order to evaluate the behavior of these materials under definitely determined wheel loads.

Additional studies were made in analyzing the effect of heavier vehicles on highway design and the corresponding increase in cost.

Although the truck turning radii studies were conducted by the Traffic Section, the valuable data included in this very comprehensive report were immediately utilized in the design of state highways.

Cooperation With Other Agencies

As in previous years, the Design Section acted as a coordinating agency relative to design problems between the Division of Highways and other state agencies for whom the construction of road and bridge improvements were undertaken.

In conjunction with the Civil Aeronautics Administration and the Bureau of Public Roads, this section continued to investigate and report on proposed airport improvement projects involving the expenditure of federal funds insofar as those improvements might affect state highways.



NEW BRIDGE CARRYING NORTH-BOUND TRAFFIC on four-lane divided
U. S. 99 across San Joaquin River at Herndon



NEW STEEL GIRDER BRIDGE on Coast Road, S. R. 1, across Navarro River
south of Albion, Mendocino County

Participating in the activities of the Institute of Transportation and Traffic Engineering, members of the Design Section prepared and presented papers on design of highways and interchanges at meetings of that group.

Screen Planting and Erosion Control

As in previous years, the landscape architects of Headquarters Design Section prepared plans for screen planting and erosion control on highway projects of this nature undertaken during the year. Because of the wide range of weather and soil conditions found in California, continuous studies and experiments are carried on by this unit to determine the most appropriate type of ground cover for use in various sections throughout the State.

The landscaping staff completed a comprehensive report on erosion control which was published in serial form in the departmental publication "California Highways and Public Works." Reprints of the entire series of articles, including specifications, will be available at an early date.

PLANNING

The Planning Section has as its major functions the processing of projects from inception to design stage, of coordinating Division of Highways planning effort with that of other governmental agencies in preparing the annual construction program, and the development of projects for future improvement from the five-year planning programs.

Planning Requires Close Liaison

The section is directly headed by the Planning Engineer who maintains close contact with the Assistant State Highway Engineer, Planning, and the several departments and districts, to the end that unified effort is directed and maintained toward planning activity. Assistants specialize in matters pertaining to apportionment and control of available funds, in contacts with federal and other outside agencies, in reviewing project reports in the field and in maintaining office records, maps and data, including a complete status of freeways, route adoptions and freeway declarations.

Advance Planning Is Continuous

The process of developing the five-year planning programs, which is one of continuing change, consumes an appreciable percentage of the section's efforts. These programs are revised annually from recommended data submitted by the districts and must be adjusted continually in conformity to available revenues, fluctuating contract prices and the application of the Collier-Burns Highway Act of 1947 and its Mayo amendments. The Planning Section prepares the recommended construction program for inclusion in the annual budget after the districts submit recommendations based on the five-year planning program. The proposed construction program is developed on the needs and priority of each project, with adjustments made to balance available funds. Subsequent revisions of the construction and rights of way programs are made during the fiscal year on the same basis from continuous study of the group of the most critical projects.



U. S. 50 WEST OF LIVERMORE

TOP—Restricted movement of traffic on the old road with narrow surface and bridges
BOTTOM—Typical scene showing free traffic movement on the new
divided four-lane road

Hearings on Freeway Projects

In highway projects which are to be developed on a freeway basis, the established policy of the California Highway Commission requires that the city or county governments concerned be given an opportunity to have a hearing regarding a proposed new routing. The Planning Section arranges the negotiations for such hearings, and when the hearings are requested before the California Highway Commission, the Planning Engineer in cooperation with the District Engineer furnishes technical and specific information regarding the highway problems involved in the particular case.

Freeways Declared

During the year 46 additional sections on state highways have been declared freeways by the California Highway Commission. This brings the total declared freeway mileage to 1,524.2 miles, an increase of 248.9 miles during the year. Hearings were requested by the local authorities in only three cases, and in these cases the final determinations were the result of mutual agreement. During the year agreement with local authorities was also consummated on a freeway project pending from last year, involving a suit wherein private interests unsuccessfully contested the department's right to adopt a freeway on revised routing.

Studies for Legislature

Studies originated by legislative resolutions, requesting investigation and report of feasibility of particular projects, routes or potential new state highways, are handled by the Planning Section. They involve collaboration with the district and other departments in assembling and analyzing data and compiling the reports to the Legislature. Eight reports were prepared by the Planning Section for submission to the Legislature in January, 1950, in accordance with legislative resolutions. Studies are being carried out on seven more investigations, on which the department will prepare reports for the next Legislature. Full time of one engineer has been assigned to one of these studies—the practicability of a toll road from San Francisco to Los Angeles.

Other Proposals Studied

Innumerable proposals, suggestions and inquiries regarding new and existing routes, plans for their development and budgets, are received from individuals and from public and semipublic organizations. Preparation of reports and replies on these subjects occupies considerable time of Planning Section personnel. Such work frequently extends into careful and comprehensive discussion and analysis important for administrative as well as engineering use.

Liaison With Other Agencies

The section maintains close association with agencies whose interests and activities are related to initial planning and budgeting of state highway programs. A prominent part in this function continues to be liaison between the Division of Highways and units of the Federal Government.

The U. S. Corps of Engineers and the U. S. Bureau of Reclamation have cooperated in helping the department to keep informed on their

programs and project plans that involve state highways. Flood control, reclamation and harbor development fall within the works which the Division of Highways finds advantageous to follow in stages of public hearings, preliminary reports and construction authorizations. Formal preliminary report reviews are processed through the State Division of Water Resources. Other departments and the respective districts of the Division of Highways are furnished the acquired data. The benefit of clearing all steps through one department, and insofar as practicable through one representative in the department, has been demonstrated.

Contracts With Federal Departments

During the year contracts have been negotiated with the Corps of Engineers for all the relocation of State Routes 57 and 142 affected by the proposed Isabella Reservoir on the Kern River. About 14 miles of highway will be revised at a cost of approximately \$2,000,000. A half-million-dollar unit will be under construction during the summer of 1950.

Agreements have been reached on the reconstruction of parts of State Route 99 in Yolo and in Solano Counties to accommodate the proposed Sacramento River Deep Water Channel and Port of Sacramento. The Corps of Engineers are starting construction in Solano County at this writing.

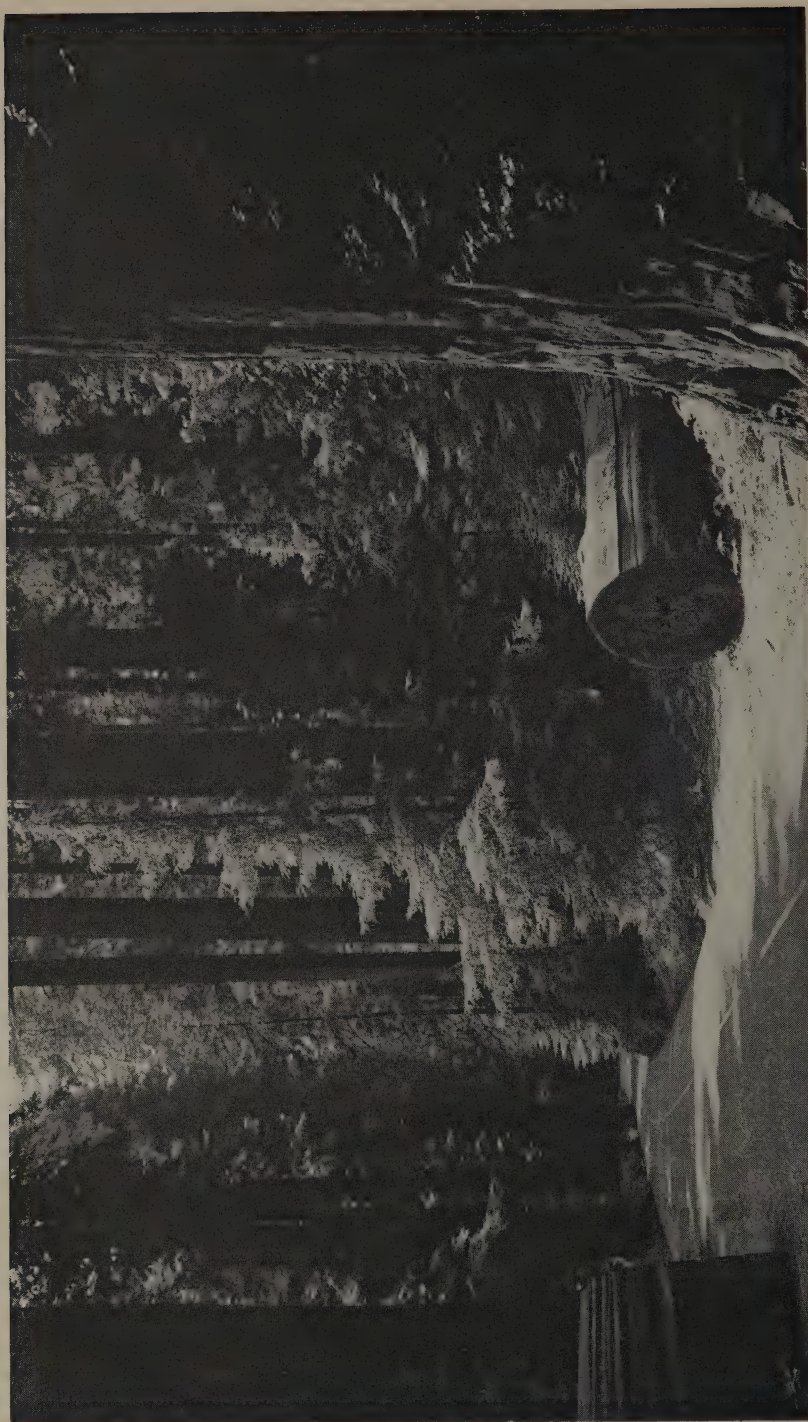
The U. S. Bureau of Reclamation has similarly contracted with the State for relocation of a part of State Route 80 affected by the proposed Cachuma Reservoir on the Santa Ynez River in Santa Barbara County. At this writing the first half of the one and one-quarter million-dollar road project has been advertised by the State for construction. Advertisements have also been published for relocation of State Route 5 near Los Gatos in Santa Cruz County prior to construction of the Lexington Dam.

Plans are being prepared for lengthening the bridge over the San Diego River on U. S. 101, part of the Federal Cooperative San Diego River and Harbor Project. On other federal flood control projects, plans are being completed for reconstruction of State Route 168 for proposed Whittier Narrows Dam and for reconstruction of State Route 4 at Big Tujunga Wash.

National Forest Highways

The Planning Section coordination of the State's participation in national forest highway programs and agreements extends through all steps of procedure. Liaison with U. S. Forest Service and the Bureau of Public Road facilitates an understanding of the objectives of each agency that is necessary if satisfactory planning for this form of federal aid is to be carried out. Of the National Forest Highway System in California, forest roads of primary importance to counties or communities within, adjoining or adjacent to national forests, three-fourths are state highways. The cost of bringing the California Forest Highway System to standards adequate for traffic requirements is estimated to be about \$191,391,000, whereas the recent apportionments of forest highway funds are about \$2,850,000 annually.

The 1950-51 Fiscal Year program included improvement on the access road to Gold Lake; on the Meyers-Mays section of the Placerville-Lake Tahoe Highway; on Carson Pass Highway; on Sonora Pass Highway; on Huntington Lake Highway; on Banning-Idyllwild Road; on



REDWOOD GROVES along U. S. Highway 101, Humboldt County



STEEL BRIDGE ACROSS KLAMATH RIVER in Humboldt County at Weitchpec, S. R. 96

NATIONAL FOREST HIGHWAY SYSTEM IN CALIFORNIA, JUNE, 1950

No.	Name	Termini	National Forest	Length, miles
Forest Highways on State Highway System				
1	Crescent City	Forest Boundary near South Fork-Oregon Line	Siskiyou, Six Rivers	33.6
2	Klamath River	Weitchpec-Mouth of Shasta River	Klamath, Six Rivers	133.0
3	Trinity River	Junction City-Horse Summit	Trinity, Six Rivers	63.5
4	Peanut-Van Duzen	Peanut-West Forest Boundary	Trinity, Six Rivers	34.0
5	Douglas City-Peanut	Douglas City-Peanut	Trinity	30.6
6	Beegum-Peanut	Beegum-Peanut	Trinity	22.0
10	Weed-Medicine Lake	U.S. 99 near Weed-North Forest Boundary	Shasta	14.9
11	Lava Beds	Spaulding Ranch-Near Stronghold	Modoc	30.6
12	Howard Gulch	Canby-Spaulding Ranch	Modoc	17.1
13	Alturas-Cedarville	West Forest Boundary, Cedarville	Modoc	10.2
14	Redding-Alturas	Adin-Canby	Modoc	21.8
15	Redding-Alturas	Southeast Corner National Forest-Near Burney	Shasta	3.5
18	Red Bluff-Susanville	12 miles West Mineral-East Forest Boundary	Lassen	36.1
19	Red Bluff-Susanville	Near Coppervale-Susanville	Lassen	15.4
20	Almanor (Sierra Way)	Almanor Dam-F.H. 22 (Feather River)	Plumas	19.0
21	Deer Creek Meadows	Forest Ranch-Deer Creek Meadows	Lassen	38.0
22	North Fork Feather River	Forest Boundary-Quincy	Plumas	53.4
23	Quincy-Beckwourth	Quincy-Beckwourth	Plumas	38.3
25	Nevada City-Downieville	North San Juan-Downieville	Tahoe	33.0
26	Yuba Pass	Downieville-Satley	Tahoe	32.2
27	Sierraville-Hobart	Randolph-1.7 Mi. S. of Sierra-Nevada Co. Line	Tahoe	15.8
28	Calpine-Clio	Calpine-Mohawk Valley	Tahoe-Plumas	7.2
29	Emigrant Gap	Near Blue Canyon-Union Mills	Tahoe	38.7
30	Truckee-Meyers	Truckee Junction-U.S. Route No. 50	El Dorado	42.4
31	Tahoe-Brockway	Tahoe City-Nevada Line	Tahoe	10.8
32	Placerville-Lake Tahoe	Pollock Pines-Nevada Line	El Dorado	46.8
33	Carson Pass	Cook Station-Willow Creek	El Dorado	42.5
34	Woodfords-Minden	Woodfords-Nevada Line	Toiyabe	6.0
35	Ebbetts Pass	Murphy-Woodfords	Stanislaus-Toiyabe	77.0
36	Topaz	2 mi. S. of Coleville-Nevada Line	Toiyabe	11.5
37	Bridgeport-Coleville	Bridgeport-2 mi. S. of Coleville	Toiyabe	30.1
38	Sonora Pass	Soulsbyville Junction-U.S. Rte. No. 395	Stanislaus-Toiyabe	74.0
39	Big Oak Flat (Tioga)	Big Oak Flat-Yosemite Park Boundary	Stanislaus	32.0
40	Tioga	F.H. 41 (U.S. Route 395)-Yosemite N.P. Boundary	Inyo	15.3
41	Red Rock-Bridgeport	Near Convict Creek-Mono Lake	Inyo	34.9
42	Red Rock-Bridgeport	Approx. 5 Mi. N. Inyo-Mono Co. Line-Approx 1 Mi. W. Rock Creek Inn	Inyo	7.0
43	Luther Pass	Woodfords-U.S. Rte. 50 near Meyers	Toiyabe-El Dorado	17.8
45	Mariposa-El Portal	Briceburg-Yosemite Park Boundary	Sierra-Stanislaus	17.8
46	Harmony Ridge	West Forest Boundary-U.S. Rte. 40	Tahoe	16.7
47	Oakhurst	Yosemite Park Boundary-Oakhurst	Sierra	14.8
48	Huntington Lake	West Forest Boundary-Huntington Lake	Sierra	40.0
49	Kings Canyon	N.P. Boundary-Deer Cove Creek	Sequoia	24.6
50	Fresno-Kings Canyon	Approx. 5 mi. W. of Deer Park-N.P. Boundary	Sequoia	12.9
51	Hoopa	Willow Creek Junction-Hoopa Indian Reservation	Six Rivers	8.7
52	Glenville-Kernville	West Forest Boundary-East Forest Boundary	Sequoia	13.0
53	Bakersfield-Freeman	Cottonwood Creek-Bodfish	Sequoia	30.1
54	Cuyama	Dutard Ranch-Cuyama River Bridge	Los Padres	15.4
55	Cuesta Pass	Cuesta-San Luis Obispo Creek	Los Padres	3.6
56	San Marcos	Santa Ynez River Bridge-South Forest Boundary	Los Padres	22.8
57	Ridge Route	Castaic-Gorman	Angeles-Los Padres	26.9
58	Arroyo Seco	La Canada-Red Box	Angeles	13.1
61	Angeles Crest	Red Box-Islip Saddle	Angeles	30.0
62	San Gabriel	South Forest Boundary-Islip Saddle	Angeles	32.0
63	Swartout	Islip Saddle-Highway near Phelan	Angeles	
64	Cajon	Devore-Near Summit	San Bernardino	24.0
			San Bernardino	14.8
65	Bear Valley	Forest Boundary near Arrowhead Springs-Pine Knot	San Bernardino	40.3
66	Fawnskin	F.H. 65-Sylvan Way via Fawnskin	San Bernardino	11.0
67	San Luis Rey	East Forest Boundary-West Forest Boundary	Cleveland	4.0
68	Mill Creek	Pine Knot-South Forest Boundary	San Bernardino	40.0
70	Idyllwild-Desert	West Forest Bdy.-State Highway Rte. 187	San Bernardino	47.8

NATIONAL FOREST HIGHWAY SYSTEM IN CALIFORNIA, JUNE, 1950—Continued

No.	Name	Termini	National Forest	Length, miles
Forest Highways on State Highway System—Continued				
71	Mt. Lassen	Southwest Boundary Lassen National Park-Mineral	Lassen	8.8
75	Manzanita Lake	Lassen N.P. Boundary-1 mi. W. of Forest Bdry.	Lassen	4.5
76	Maricopa-Ventura	North Forest Bdry.-South Forest Bdry.	Los Padres	49.4
77	Mt. Shasta-Mt. Lassen	Mt. Shasta City-Northwest Bdry. Lassen N.P.	Shasta-Lassen	91.3
79	Morgan Summit- Morgan Springs	Morgan Summit-Morgan Springs	Lassen	3.8
80	El Cajon-Jucumba	Alpine-La Posta Ranch	Cleveland	27.8
81	Mammoth Lakes	U.S. Route 395-McLeod Lake	Inyo	10.7
82	June Lake	U.S. Route 395-U.S. Rte. 395 via Silver Lake	Inyo	15.0
84	Morro Bay	East Forest Bdry.-West Forest Bdry.	Los Padres	3.6
91	Bishop Creek	East Forest Boundary-Sabrina Lake	Inyo	11.0
94	East Walker River	South Forest Boundary-Nevada Line	Toiyabe	8.5
Forest Highways Not on State Highway System				
7	Mendocino Pass	Williams Creek-Mouth of Grindstone	Mendocino	54.0
8	Lucerne-Bartlett	Lucerne Junction-Hough Springs	Mendocino	22.7
16	Willow Creek	Adin-Grasshopper Valley	Modoc	30.0
17	Westwood	State Highway No. 29-Forest Highway No. 92	Lassen	18.0
24	Gold Lake	Graeagle-Yuba Pass Junction	Plumas	15.0
44	Aspen Valley	Big Oak Flat Highway Bdry.-Yosemite N.P.	Stanislaus	2.0
59	Vincent	Vincent-Barley Flat	Angeles	25.0
60	Mt. Wilson	Red Box-Mt. Wilson	Angeles	5.0
72	Idyllwild	Keen Camp-N. Forest Bdy.	San Bernardino	21.1
73	Laguna	Laguna Junction-Cuyamaca Lake	Cleveland	25.4
74	North Fork	Oakhurst Junction-F.H. 48	Sierra	26.5
78	Generals Highway	Sequoia Park-General Grant Grove, Kings Canyon N.P.	Sequoia	10.4
83	Pine Crest	F.H. 38 (Sonora Pass)-Pine Crest	Stanislaus	0.9
85	Round Lake	U.S. Route 50-F.H. 35 (Carson Pass)	El Dorado	11.0
86	Blue Lakes	F.H. 33 (Carson Pass)-F.H. 35 (Ebbetts Pass)	El Dorado-Mono- Stanislaus	18.0
87	Clarks Fork	F.H. 35 (Ebbetts Pass)-F.H. 38 (Sonora Pass)	Stanislaus	21.0
88	Clavey River	F.H. 38 (Sonora Pass)-F.H. 39 (Big Oak Flat)	Stanislaus	30.0
89	Rock Creek	U.S. 395-Rock Creek Lake	Inyo	12.0
90	Western Divide	F.H. 52-Quaking Aspen Meadows (State Rte. 127)	Sequoia	39.0
92	Feather Lake	F.H. 77-State Rte. 29	Lassen	47.0
93	Salmon River	Somes Bar-Sawyers Bar	Klamath	34.0
95	Mt. Pinos	U.S. Route 99-Bitter Creek Saddle	Los Padres	21.3
96	Mosquito Ridge	Foresthill-Beartrap Saddle	Tahoe	19.2
97	Herring Creek	F.H. 38 (Sonora Pass Hwy.)-Herring Creek Camp	Stanislaus	9.5
98	Everitt Memorial Hwy. ...	Mt. Shasta City-Panther Meadow	Shasta	14.8
99	Calaveras Big Trees	F.H. 35-N. Bdy. South Grove	Stanislaus	10.5

Forest Highways on the State Highway System 1,922.7 miles

Forest Highways not on the State Highway System 543.3 miles

California Forest Highway System 2,466.0 miles

Western Divide Forest Road in Tulare County; on Mt. Pinos Road west of Lebec; and initial construction on the Calaveras Big Trees-South Grove project.

The status of the National Forest Highway System in California, with recent changes in classification, is given in the accompanying tabulations.

CONSTRUCTION AND EXPENDITURES BY THE PUBLIC ROADS ADMINISTRATION ON FOREST HIGHWAY
SYSTEM, STATE OF CALIFORNIA, UP TO AND INCLUDING FISCAL YEAR 1950

Rte. No.	Name of route	Termini of projects	County	National forest	Total length of route, miles	On Federal Forest Highway Projects			
						Miles built or under construction	Total expenditures	Federal funds	Cooperative funds
1	Crescent City (U.S. 199).....	Forest Boundary near South Fork-Oregon Line.....	Del Norte.....	Siskiyou-Six Rivers.....	33.6	26.7	\$1,478,904	\$695,925	\$782,979
2	Klamath River.....	Wetchee-Mouth of Shasta River.....	Humboldt-Siskiyou.....	Klamath-Six Rivers.....	133.0	49.7	1,274,753	1,176,191	98,562
3	Trinity River (U.S. 299).....	Junction City-Horse Summit.....	Trinity-Humboldt.....	Trinity-Six Rivers.....	30.6	4.8	129,884	129,884	4,248
5	Douglas City-Peanut.....	Douglas City-Peanut.....	Trinity.....	Trinity.....	30.6	24.9	1,175,340	1,171,092	4,248
7	Mendocino Pass.....	Williams Creek-Mouth of Grindstone.....	Mendocino-Gleann.....	Mendocino.....	54.0	54.0	451,365	416,365	35,000
8	Lucerne-Bartlett.....	Lucerne Junction-Hough Springs.....	Lake.....	Mendocino.....	22.7	22.7	54,560	47,341	7,219
10	Weed-Medicine Lake (U.S. 97).....	U.S. 99 near Weed-North Forest Boundary.....	Siskiyou.....	Shasta.....	14.9	9.9	99,003	99,003	---
11	Lava Beds.....	Spaulding Ranch-Near Stronghold.....	Modoc.....	Modoc.....	30.6	30.6	703,199	703,199	---
12	Howard Gulch.....	Canby-Spaulding Ranch.....	Modoc.....	Modoc.....	17.1	17.1	484,175	484,175	9,180
13	Alturas-Cedarville.....	West Forest Boundary-Cedarville.....	Modoc.....	Modoc.....	10.2	7.7	117,776	58,888	58,888
14	Redding-Alturas (U.S. 299).....	Adin-Canby.....	Modoc.....	Modoc.....	21.8	10.9	214,537	214,537	---
18	Red Bluff-Susanville.....	12 mi. W. of Mineral-East Forest Boundary.....	Tehama-Plumas.....	Lassen.....	36.1	24.3	527,634	350,634	177,000
20	Almanor (Sierra Way).....	Almanor Dam-F. H. 22 (Feather River).....	Plumas.....	Plumas.....	19.0	20.8	1,106,877	1,106,877	---
21	Deer Creek Meadows.....	Forest Ranch-Deer Creek Meadows.....	Butte-Tehama.....	Lassen.....	38.1	25.9	912,189	821,548	90,641
22	North Fork Feather River.....	Forest Boundary-Quincy.....	Butte-Plumas.....	Plumas.....	53.4	5.7	200,700	200,700	---
23	Quincy-Beckwourth.....	Quincy-Beckwourth.....	Plumas.....	Plumas.....	38.3	38.3	805,271	551,649	253,622
25	Nevada City-Downieville.....	North San Juan-Downieville.....	Nevada-Yuba.....	Tahoe.....	33.0	11.7	1,639,239	1,636,079	3,160
26	Yuba Pass.....	Downieville-Sattley.....	Sierra.....	Tahoe.....	31.2	31.2	757,753	757,753	---
27	Sierraville-Hobart.....	Randolph-1.7 mi. S. Sierra-Nevada Co. Line.....	Sierra-Nevada.....	Tahoe.....	15.8	15.8	478,286	476,129	2,157
28	Calpine-Clio.....	Calpine-Mohawk Valley.....	Sierra-Plumas.....	Tahoe-Plumas.....	7.2	7.2	212,544	212,544	---
29	Emigrant Gap (U.S. 40).....	Near Blue Canyon-Union Mills.....	Nevada-Placer.....	Tahoe.....	38.7	6.9	246,826	246,826	---
30	Truckee-Meyers.....	Truckee Junction-U.S. Rte. 50.....	Nevada-Placer.....	Tahoe.....	42.4	14.5	494,732	457,303	37,429
31	Tahoe-Brookway.....	Tahoe City-Nevada Line.....	El Dorado.....	El Dorado-Tahoe.....	10.8	3.4	257,458	251,024	6,434
32	Placerville-Lake Tahoe.....	Pollock Pines-Nevada Line.....	Placer.....	Tahoe.....	46.8	15.8	2,659,805	2,347,101	312,704
35	Ebbetts Pass.....	Murphy-Woodfords.....	El Dorado.....	El Dorado.....	77.0	42.1	362,796	215,586	147,210
36	Topaz (U.S. 395).....	2 mi. S. Coleville-Nevada Line.....	Calaveras-Alpine.....	Stanislaus-Toiyabe.....	11.3	11.3	215,037	214,237	800
38	Sonora Pass.....	Soulsbyville Junction-U.S. Rte. 395.....	Mono.....	Toiyabe.....	74.0	32.5	1,000,873	882,681	118,242
40	Harmony Ridge.....	West Forest Boundary-Oct. F. H. 29.....	Nevada-Mono.....	Stanislaus-Toiyabe.....	16.7	5.7	282,125	282,125	---
47	Oakhurst.....	Yosemite National Park Boundary-Oakhurst.....	Nevada-Placer.....	Tahoe.....	14.8	14.8	591,435	591,435	---
48	Placerville-Lake.....	Forest Boundary-Huntington Lake.....	Mariposa-Madera.....	Sierra.....	40.0	3.9	448,021	426,517	21,504
49	Fresno-Kings Canyon.....	Approx. 5 mi. W. of Deer Park-National Park Boundary.....	Fresno.....	Sierra.....	12.9	1.6	202,025	202,025	---
50	---	---	Fresno-Tulare.....	Sequoia.....	---	---	---	---	---

51	Hoopa.....	Willow Creek Junction-Hoopa Indian Reservation.	Humboldt.....	Six Rivers.....	8.7	8.7	274,610	274,610	338,865
54	Cuyama.....	Dutard Ranch-Cuyama River Bridge.	Santa Barbara.....	Los Padres.....	15.4	15.4	312,927	312,927	180,762
56	San Marcos.....	Santa Ynez River Bridge-South Forest Boundary.	Santa Barbara.....	Los Padres.....	22.8	16.4	211,791	211,791	180,762
60	Mt. Wilson.....	Red Box-Mt. Wilson.....	Los Angeles.....	Los Angeles.....	5.0	5.0	185,213	185,213	8,294
61	Angles Crest.....	Red Box-Isip Saddle.....	Los Angeles.....	Los Angeles.....	30.0	30.0	887,571	887,571	8,294
62	San Gabriel.....	South Forest Boundary-Isip Saddle.....	Los Angeles.....	Los Angeles.....	32.0	32.0	1,450,820	1,450,820	1,172,144
63	Swartout.....	Isip Saddle-Highway near Phelan.....	Los Angeles-San Bernardino	Los Angeles-San Bernardino	24.0	24.0	304,962	304,962	611,821
65	Bear Valley.....	Forest Boundary near Arrowhead Springs-Pine Knot.....	San Bernardino.....	San Bernardino.....	40.3	20.8	1,302,041	690,220	55,701
68	Mill Creek.....	Pine Knot-South Forest Boundary.....	San Bernardino.....	San Bernardino.....	40.0	9.1	1,440,995	1,440,995	25,000
70	Idyllwild-Desert.....	Keen Camp-Junction State Rte. 187.....	Riverside.....	San Bernardino.....	47.8	33.2	525,564	469,863	25,000
71	Mt. Lassen.....	SW. Boundary Lassen National Park-Mineral Boundary.....	Tehama.....	Lassen.....	8.8	6.0	125,814	100,814	16,931
72	Idyllwild.....	San Jacinto Ranger Station-North Forest Boundary.....	Riverside.....	San Bernardino.....	21.1	5.5	16,931	16,931	25,000
73	Laguna.....	Laguna Junction, Cuyamaca Lake.....	San Diego.....	Cleveland.....	25.4	25.4	455,497	430,497	237,570
74	North Fork.....	Oakhurst Junction-Auberry (F.H. 47 to F.H. 48).....	Madera-Presno.....	Sierra.....	26.5	4.3	237,570	237,570	102,372
75	Manzanita Lake.....	Lassen National Park Boundary-1 mi. W. of Forest Boundary.....	Shasta.....	Lassen.....	4.5	4.5	102,372	102,372	335,202
76	Maricopa-Ventura (U.S. 399).....	North Forest Boundary-South Forest Boundary.....	Ventura.....	Los Padres.....	43.4	25.7	1,149,576	335,202	814,374
77	Mt. Shasta-Mt. Lassen.....	Mt. Shasta City-NW. Boundary Lassen National Park.....	Siskiyou-Shasta.....	Shasta-Lassen.....	91.3	81.4	1,777,074	1,754,528	22,546
78	Generals Highway.....	Sequoia Park-General Grant Grove, Kings Canyon National Park.....	Tulare.....	Sequoia.....	10.4	10.4	---	---	---
79	Morgan Summit-Morgan Springs.....	Morgan Summit-Morgan Springs.....	Tehama.....	Lassen.....	3.8	3.8	115,386	115,386	---
81	Mammoth Lakes.....	U.S. Rte. 395-McLeod Lake.....	Mono.....	Inyo.....	10.7	9.1	231,656	231,656	---
83	Pine Crest.....	F.H. 38 (Sonora Pass)-Pine Crest.....	Tuolumne.....	Stanislaus.....	0.9	0.9	32,297	32,176	121
84	Morro Bay (U.S. 466).....	East Forest Boundary-West Forest Boundary.....	San Luis Obispo.....	Stanislaus.....	3.6	3.6	128,052	128,052	---
87	Clarks Fork.....	F.H. 35 (Ethberts Pass)-F.H. 38 (Sonora Pass).....	Tuolumne-Alpine.....	Stanislaus.....	21.0	9.2	345,462	345,462	---
90	Western Divide.....	F.H. 52-Quaking Aspen Meadows (State Hwy. 127).....	Kern-Tulare.....	Sequoia.....	39.0	4.6	483,854	483,854	---
92	Feather Lake.....	F.H. 77-F.H. 19 (State Hwy. 29).....	Lassen.....	Lassen.....	47.0	9.2	176,837	176,837	---
93	Salmon River.....	Somes Bar-Sawyer Bar.....	Siskiyou.....	Klamath.....	34.0	17.0	766,757	685,758	101,029
95	Mt. Pinos.....	U.S. Rte. 99 (Near Lebec)-Bitter Creek Saddle.....	Kern-Ventura.....	Los Padres.....	21.3	6.0	177,574	177,574	---
96	Mosquito Ridge.....	Foresthill-Beartrap Saddle.....	Placer.....	Tahoe.....	19.2	19.2	1,945,923	1,730,964	214,964
	Totals.....	Survey.....			1,788.3	957.9	\$35,270,880	\$39,542,280	\$5,737,600
							1,166,107	1,063,100	103,007
	Totals.....				1,788.3	957.9	\$36,445,987	\$30,605,380	\$5,840,607

TRAFFIC

The organization and primary functions of the Traffic Section remained unchanged during the past year although increased traffic volumes throughout the State generally called for an increased tempo in the functions of the section. Greater emphasis on highway signing and greater need for traffic signals and speed zoning necessitated an increase in the personnel of the traffic control staff during the latter half of the year.

The Financial Responsibility Law, which became effective at the start of the fiscal year, substantially increased the number of reported highway accidents to be processed through this office.

The four divisions through which the work of the Traffic Section is handled are:

1. Accident analysis and research
2. Geometric standards
3. Traffic control
4. Highway planning survey

Accident Analysis and Research

This section receives all reports of motor vehicle accidents as obtained by the California Highway Patrol and the Maintenance Department of the Division of Highways. Those accidents on rural state highways are segregated, located by highway section and mile, and coded for recording on punched cards. Through machine sorting numerous accident tabulations, including the "Annual Report of Motor Vehicles Accidents on Rural State Highways," are produced.

The section also isolates and studies points of recurring accidents, investigates all recommendations by Highway Patrol officers concerning highway conditions, and furnishes accident data for budget studies and other activities of the Division of Highways.

Major studies during the year included the preparation of a report covering median strips on divided highways, a report for a Public Utilities Commission hearing covering capacity and accident data on trucks and busses, a study to determine the merits of a positive traffic barrier on the San Francisco-Oakland Bay Bridge, and the preparation of the Traffic and Highway Engineering Section of the Annual Inventory of Traffic Safety Activities for the National Safety Council.

Geometric Standards

This section checks all preliminary plans of the Division of Highways to determine their adequacy for present and future traffic volumes and for any features affecting the orderly and safe movement of traffic. Also reviewed are all project reports from the traffic standpoint and economic studies are made to determine the benefit ratio of a proposed improvement and the relative economics of alternate routings.

Major studies during the year included a report: "Truck Paths on Short Radius Turns," one of the findings of which showed that a substantially wider path is required for the maximum legal semitrailer than for the longer truck and trailer combinations. A report on school crossings in rural areas disclosed that only 0.05 percent of all accidents on rural

state highways occur at regular rural suburban school crossings. The plans and accident records of a number of typical channelized intersections on California highways were prepared for a study by the Committee on Channelization of the National Research Council.

Traffic Control

This section reviews all warrants, preliminary and final plans and specifications for illumination and traffic signal projects on the State Highway System. A total of 167 lighting and 113 signal installations were made during the past year at a total estimated cost of \$1,476,000.

Over 200 speed zone surveys were made, which resulted in the establishment of 23 25-mile zones, 98 35-mile zones, and 26 45-mile zones. Five previously established speed zones were removed during the year.

A 23,000-lumen fluorescent lighting fixture, designed by this section, provided a major advance in highway illumination. The first installation was made during the year. Other activities included the design of a low cost lighting pole, revision of the General Specifications for Electric Traffic Signals and Highway Lighting, and the preparation of a supplement to the Manual of Warning Signs, Lights and Devices for Use in Performance of Work on Highways.

Highway Planning Survey

Cooperative agreements have been made with 11 counties for reinventory, and revision of maps of county and other local roads. Field notes identify the roads by name and number, cover their physical characteristics, and show the adjacent culture. Field work has been completed, or nearly so, in Butte, Sierra, Nevada, and San Mateo Counties; mapping is well advanced. Additional space and personnel have been engaged to accelerate the work.

In addition, an extensive system of traffic count stations has been established on the roads that have been reinventoried. Such stations supplement others—state-wide in scope—that were confined to the Federal Aid Secondary System. Included in the state-wide network of counts are: 1,796 stations that were occupied for 24 hours on week days; and 267 stations where traffic was counted 24 hours in alternate months in order to approximate its seasonal variation.

Assistance was given several districts in collecting, assembling and analysing information on the origins and destinations of vehicles. This information was acquired to evaluate proposals for highway locations. Approximately 300,000 drivers of vehicles were interviewed in 10 studies.

In the annual weighing program in June, 5,118 trucks were weighed. Plans are now being made to put this work on a quarterly basis for the coming year to study more closely the performance of road surfaces under varying frequencies of axle loads.

PUBLIC AND EMPLOYEE SAFETY

With emphasis placed upon the traffic safety problem by the Governor's Coordinating Committee on Traffic Safety, the division through the Safety Section has given assistance to a number of University of California's Extension Division Driver and Driver Instruction groups,



U. S. 50 BETWEEN LIVERMORE AND TRACY
TOP—Congestion caused by mixed traffic on narrow road
BOTTOM—View of relocated section showing divided construction
with intersection lighting

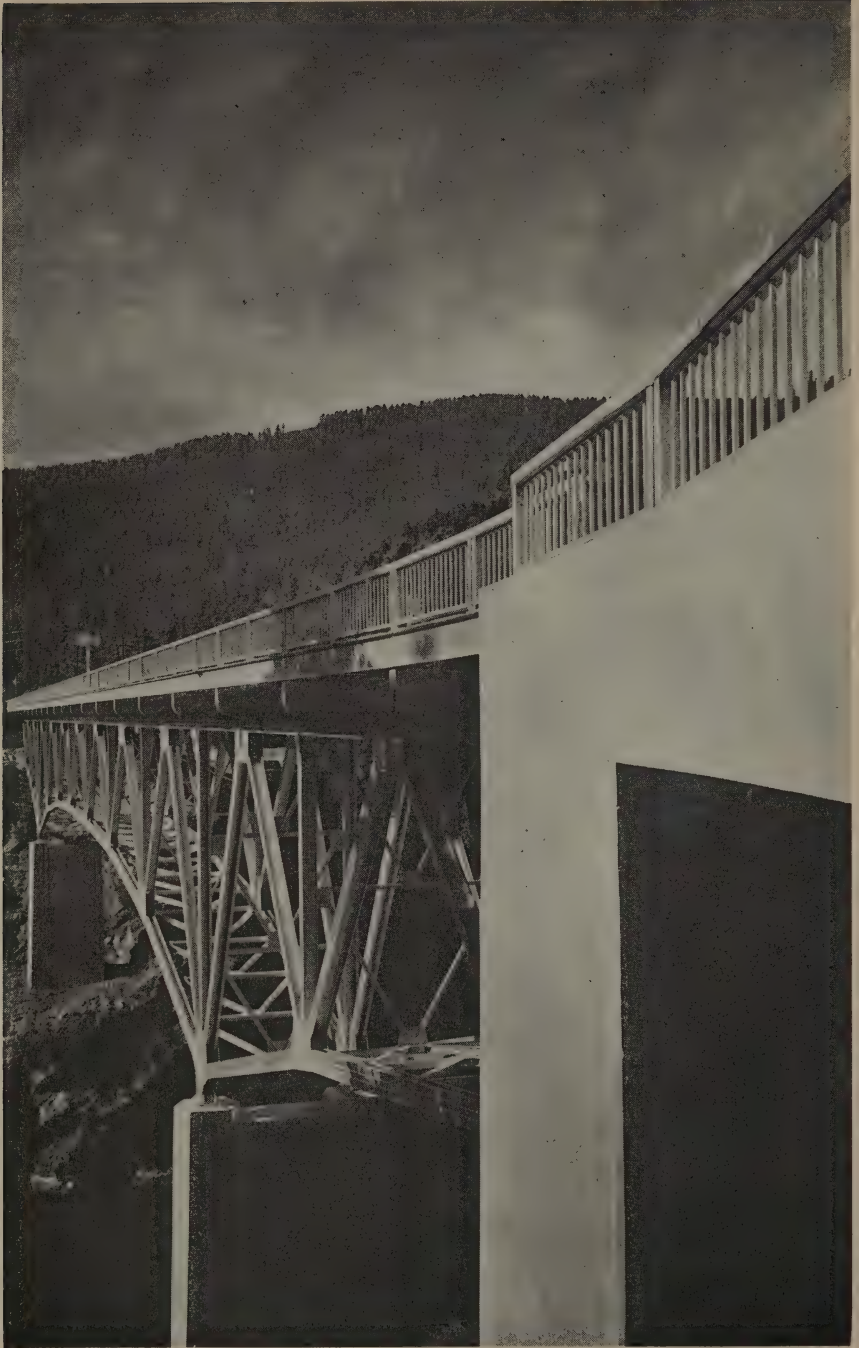
to service clubs, civic groups and to the California Highway Patrol Academy. Speakers, teachers, and discussion leaders together with visual educational equipment have been provided, emphasizing the inherent safety features incorporated in highway designing, especially in that of freeways.

A comprehensive study by the Safety Section of the accident situation in the Division of Highways paralleling the Governor's state-wide study of state motor vehicle accidents has indicated a warrant for an over-all safety program covering both industrial and motor vehicle accident situations.

With the approval of the State Highway Engineer, full-time safety supervisors have been named in each of the 11 districts to emphasize and administer the accident prevention program.

A vehicle driver safety booklet prepared by the section for division employees has been given gratifying recognition by leading national safety organizations.

The Safety Section gives close attention to the rulings and orders of the Division of Industrial Safety and to the law as set forth in the Labor Code so as to insure compliance in all Division of Highways activities.



NEW STEEL ARCH BRIDGE on State Sign Route 96 across Klamath River
at Weitchpec, Humboldt County

BRIDGES

In the state highway organization the assistant state highway engineer, bridges, exercises executive authority over design and construction of state highway bridges, and over the maintenance and operation of the San Francisco-Oakland Bay Bridge. The three functions are headed as follows and reports on activities are described on the following pages:

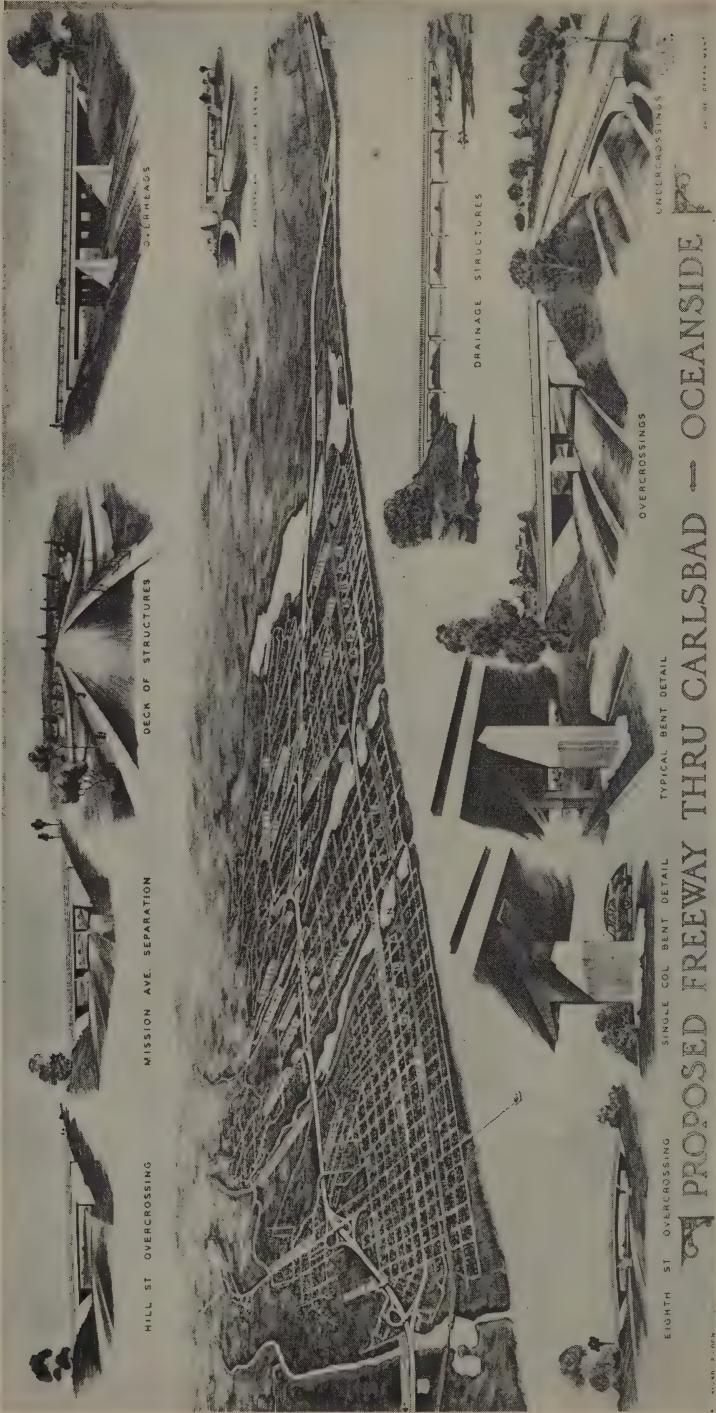
- (1) Bridge Department—Planning
- (2) Bridge Department—Operations
- (3) San Francisco-Oakland Bay Bridge and Carquinez Bridge—
Operation and Maintenance

In all phases, work on bridges has increased tremendously. Vehicular traffic on the Bay Bridge has gained approximately 5 percent as compared to the total number of vehicles of the preceding fiscal year. Such an increase adds greatly to the problems of operations and administration.

In Headquarters Bridge Department the work picture of functions one and two has changed entirely from prewar programs. In the earlier budgets, rural highway construction predominated and about 20 percent of the funds were used for bridges. For many years expenditures averaged around \$3,000,000. Since construction was resumed after World War II, annual bridge budgets have varied from 14 to 20 million with a great deal of assistance given counties on secondary projects. Expansion to handle the new program and speeding up design to have plans one or two years ahead of construction are some of the problems discussed in this report.

PLANNING

Since the increased revenue under the Collier-Burns Act became available design of bridges for the augmented highway program has, of necessity, been expanded. Bridge work is further increased by the more rapid development of urban freeways since the war. During the last two years bridges have accounted for 55 percent of freeway construction cost compared to 12 percent on rural highways. In connection with this urban freeway development and design the Planning Section of the Bridge Department also performs additional functions. Over-all pictorial studies for considering structure types have been found useful in layout studies and discussion with local interests. One example is the drawing of the proposed freeway through Carlsbad and Oceanside reproduced herein. The Preliminary Investigation Section has also cooperated with the districts and other departments in geologic exploration.



PROPOSED FREEWAY THRU CARLSBAD - OCEANSIDE

SKETCH OF PROPOSED FREEWAY on Coast Highway, U. S. 101, through Carlsbad and Oceanside, San Diego County

Under the Planning Section are the following three units:

Preliminary Investigation

The Preliminary Investigation Section functions to present in report form an analysis of bridge requirements imposed by geologic, hydrographic, hydrologic, and topographic conditions at proposed bridge sites; by boat, rail, and highway traffic, and by specifications imposed by various interested agencies. The reports are used by design and construction forces, and in the making of budget estimates; and, upon completion of a given structure, the pertinent preliminary report is filed as part of the structure's permanent record.

During the past year, the mobile foundation testing laboratory, described in the Third Annual Report, has had steadily increasing usage, particularly on proposed major construction projects. In addition to bridge foundation work, this equipment has been employed for district foundation studies involving embankments in water and on unstable soils.

The gasoline hammer driven foundation equipment continues to be used for foundation determination at the majority of state bridge sites. In addition to state work, investigations have also been made for county, city and federal aid secondary bridge projects.

In the last fiscal year the section completed reports for all remaining structures in the 1949-50 Fiscal Year budget, and approximately 90 percent of the structures proposed for the 1950-51 Fiscal Year program. The reports completed for the 1950-51 program represented a structure value of \$15,096,000. In addition, reports completed for structures on the Federal Aid Secondary System, and for other state agencies and political subdivisions during this fiscal year represented a structure value of \$518,000. A total of 142 reports were prepared.

Bridge Design

This past year the Design Section of the Bridge Department has prepared plans and specifications for the construction or improvement of 227 structures totaling in cost approximately \$15,600,000.

Some of these structures involved repairs, bridge widenings, large culverts, cattlepasses, pedestrian underpasses and pedestrian overheads, and major bridge structures. Fifty-nine of these bridges, representing a value of approximately \$10,000,000, were for freeway construction in metropolitan areas; the other structures were on rural highways.

Among the new developments in bridge construction for California was the design of a prestressed concrete pedestrian bridge across the Arroyo Seco Channel. It is hoped by the construction of this experimental type of design to gain sufficient experience to extend its use to other larger and more important freeway structures. By so doing it is believed there are excellent possibilities of effecting not only considerable savings in money to the State but also in effecting improvements in the general appearance by imparting more graceful and pleasing lines to freeway structures.

In addition to preparing designs for these state highway structures the Design Section has cooperated with many counties of the State on their federal aid secondary highway bridge problems.

**BRIDGES ON THE STATE HIGHWAY SYSTEM SEGREGATED AS TO NUMBER,
LENGTH AND AREA BY STRUCTURE TYPE**
(As of June 30, 1950)

Structure type	Number		Length (feet)	Area (square feet)
	1950	1949	1950	1950
Concrete arch.....	280	277	45,697	1,012,422
Concrete girder.....	972	953	152,208†	7,551,108
Concrete slab.....	1,507	1,470	80,376†	2,923,221
Masonry arch.....	43	44	1,414	31,115
Subtotal concrete and masonry.....	2,802	2,744	279,695	11,517,866
Steel arch.....	4	4	1,618	25,194
Steel plate girder.....	97	88	79,792	1,765,990
Steel stringer.....	256	248	51,429	2,125,136
Steel deck truss.....	31	29	22,702	1,163,691
Steel pony truss.....	46	46	16,227	213,114
Steel through truss.....	93	96	75,123	1,435,318
Suspension.....	4	5	15,712	894,335
CMP multiplate and arch.....	46	43	1,046	35,636
Subtotal steel.....	580	560	263,649	7,658,414
Timber arch.....	6	6	1,434	11,306
Timber stringer.....	1,068	1,118	175,299	3,343,622
Timber deck truss.....	24	25	7,460	74,812
Timber pony truss.....	16	18	4,786	60,763
Timber through truss.....	8	13	2,097	28,835
Subtotal timber.....	1,122	1,180	91,076	3,519,338
Total bridges.....	4,504	4,483	634,420	22,695,618
Underpasses.....	161	156	-----	-----
Overheads*.....	100	97	-----	-----
Combined bridge and overhead*.....	32	33	-----	-----
State highway separations*.....	28	23	-----	-----
Road undercrossings*.....	97	76	-----	-----
Road overcrossings.....	108	86	-----	-----
Pedestrian undercrossings*.....	102	101	-----	-----
Pedestrian overcrossings.....	21	18	-----	-----
Cattlepasses*.....	126	129	-----	-----
Tunnels.....	17	17	12,226	-----
Retaining walls.....	10	11	9,738	-----
Miscellaneous.....	34	25	121	9,888
Total structures.....	4,855	4,790	656,505	22,705,506
Railroad grade crossings.....	935	929	-----	-----

* Separations so noted are listed under structure type above.

† The figure given in the Third Annual Report for length of timber stringer bridges was in error and therefore the consequent totals were also in error.

NOTES: Four underpasses, four overheads and one bridge and overhead also serve as state highway separations, and two tunnels serve both as underpasses and state highway separations.

An effort is continually being made to prepare bridge designs which will incorporate the latest and most efficient construction methods in order to reduce bridge construction costs to a minimum.

Bridge Research

Special studies in hydraulics, economics and geology and maintenance of a reference library were continued as regular functions of the Bridge Research Section and structural research was added to those functions.

In hydraulics a statistical appraisal was made of the flooding of underpasses to determine whether adequate provisions are being made for outfalls. For gravity outfalls the incidence of serious trouble averaged

once in 169 years of service and deep flooding once in 406 years. For forced outfalls the record was less satisfactory—serious trouble once in 17 years and deep flooding once in 30 years. Causes have been catalogued for guidance of future designs. The most frequent cause was migrant water diverted into underpasses from nonhighway sources.

The section also joined with representatives of Design, Construction and Maintenance Departments in a joint bank protection study. Bibliography has been compiled, basic principles have been analyzed and reconnaissance of protective works is under way. Findings are to be published in a series of articles beginning next fall.

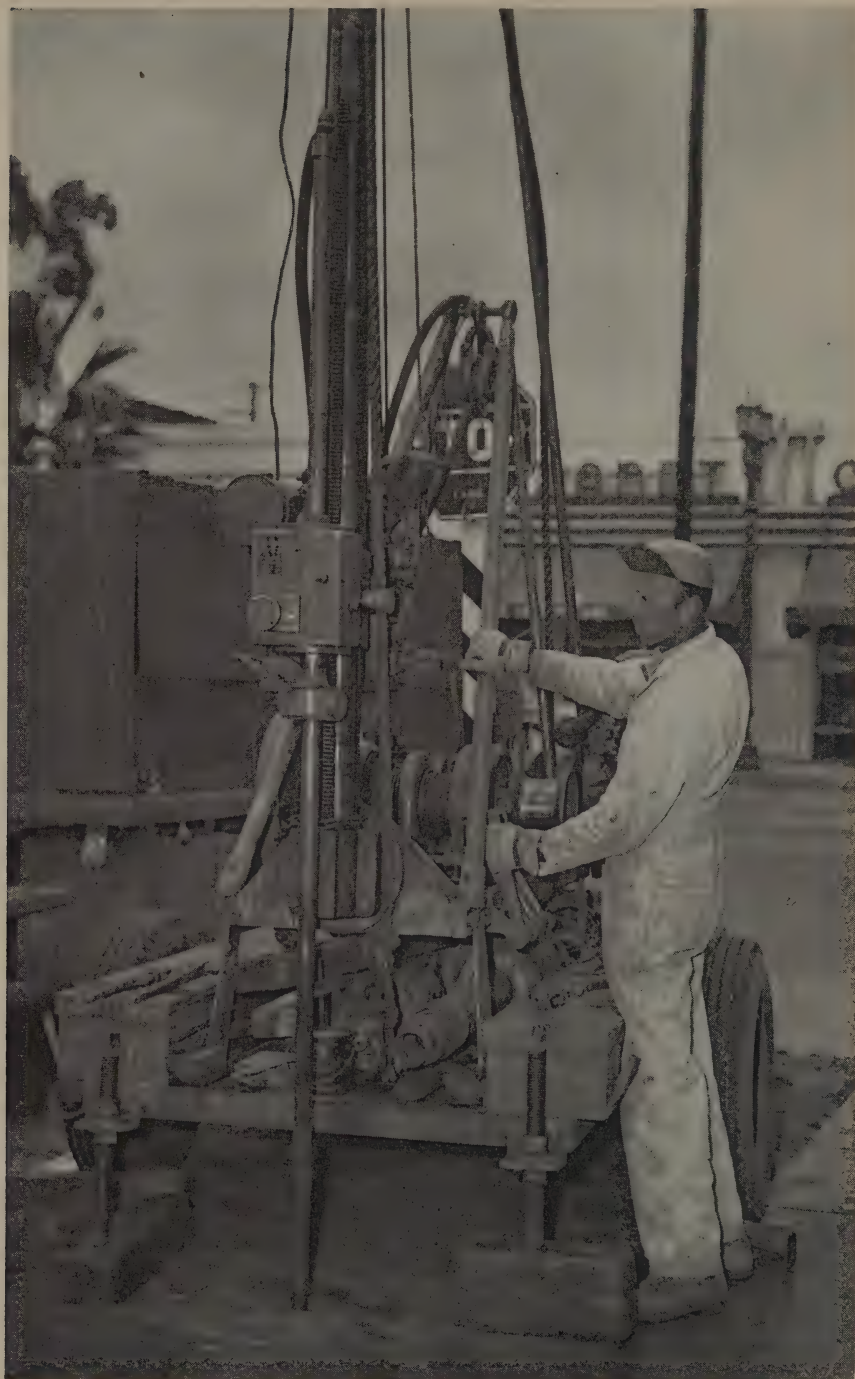
Economic studies of San Mateo-Hayward and Dumbarton Bridges were continued for the California Toll Bridge Authority, which agency was authorized by Chapter 1044, Statutes of 1949, to purchase these two bridges. In accordance with the legislation directing a survey of Route 231 connecting Harbor Freeway with Long Beach Freeway, studies of channel crossings in the San Pedro-Terminal Island-Long Beach area were also continued.

A program was initiated jointly with the Institute of Transportation and Traffic Engineering of the University of California for the investigation of static and dynamic stresses in highway bridges under actual vehicle loads, using as a full-scale model the San Leandro Creek Bridge and Overhead which is now under construction on the East Shore Freeway in Alameda County.

In engineering geology, the section has modernized and improved methods and tools for conducting bridge foundation investigations.



PORTABLE ROTARY DRILL RIG mounted on barge for subsurface test borings in San Francisco Bay



PORTABLE ROTARY DRILL RIG developed by the department for
bridge foundation investigations

Rotary drilling equipment of an extremely light and portable design, shown in accompanying illustrations, has been developed for the purpose of gaining access to difficult sites and penetrating earth materials regardless of the drilling problem involved. The drill rig, mounted on steel skids, is capable of moving itself up a vertical cliff, if necessary, by means of its own power and hoist, and is transported by a truck-drawn, two-wheel trailer. The tow truck is equipped with a water tank for rotary drilling, suitable tool binds, and a small field testing laboratory compartment for on-the-spot determination of control criteria.

Equipment for conducting pile-load and plate-bearing tests has been developed and is now in use under various conditions as illustrated. Loads are applied by means of a constant pressure, automatic control, hydraulic power unit and suitable pressure cells. Light, pin-connected A-frame-type trusses furnish the required load reaction when properly anchored. The method constitutes a decided improvement over conventional procedures requiring the use of large tanks, loading platforms or continual manual operation.

OPERATIONS

This section of bridge functions includes construction, maintenance and other activities of a miscellaneous nature. The present trend is toward the allocation of a greater percentage of available construction funds for structures, and the majority of these are of the highway grade separation type in urban areas. This type of structure is much more complicated in design than the normal rural bridge, and the complexities, coupled with the increase in the number of structures on the drafting boards, have been accentuated by a shortage of engineering personnel.

During the year the net gain in personnel of the department has been only 20 men, resulting in a total of 374 employees at the end of the fiscal year.

Construction

Bridge construction has continued through the year at the accelerated pace set by the Collier-Burns Act of 1947. The major construction projects completed and underway are described briefly as follows:

Over a million dollars were spent in new construction along the Klamath River and in replacing antiquated bridges at Weitchpec, Camp Creek, Dillon Creek and Clear Creek, all in the section of road between Weitchpec and Happy Camp.

Along the northern coast near Fort Bragg, major repairs were made to the bridge across Big River and a high level steel truss is nearing completion across Salmon Creek.

In the Bay area, construction was continued on the Eastshore Freeway leading south from Oakland; the freeway itself was opened to 98th Avenue, after completion of the High Street structure. Separation structures were completed at 98th Avenue and Hegenberger Road. Also under way in this area are separation structures at 42d Avenue and San Leandro Creek.

On the Bayshore Freeway in San Francisco all construction has been centered around the separation structures at Army and Alemany Streets where several major traffic bottlenecks are being eliminated.



EQUIPMENT DEVELOPED BY THE DEPARTMENT for making pile-load
and plate-bearing tests

In Roseville, a hazardous crossing of seven railroad tracks was eliminated with the completion of the underpass structure and a new section of highway two miles north of town, which included improved alignment at the Andora Underpass.

The Stockton By-Pass was open to traffic this year, placing in service eight new structures.

In the San Joaquin Valley a parallel bridge over the San Joaquin River at Herndon completed another link in the four-lane divided section of highway north of Fresno. Along the Monterey Coast and in the Salinas Valley a number of smaller structures were completed, widening and renewing existing facilities.

In the southern part of the State, the Los Angeles area continued as the high spot of construction with a number of separation structures being built on several of the proposed freeways.

On the Hollywood Freeway, structures were completed at Santa Monica Boulevard, Normandie Avenue, Vermont and Melrose Avenue, Heliotrope Drive, Glendale Boulevard, East Edgeware Road, Figueroa Street, Spring Street and Western Avenue. In addition, work was finished on the unique Four Level Structure which will separate the Hollywood Freeway, Arroyo Seco Parkway and Harbor Freeway.

On the Santa Ana Freeway, three structures were completed at Atlantic Boulevard, East Los Angeles Station and Goodrich Avenue.

In the San Diego area, a number of smaller bridges have been completed, including some planned for the extension of the Cabrillo Freeway toward Escondido. On the extension of the freeway between San



RECONSTRUCTED BRIDGE on Coastal Highway, S. R. 1, across Big River south of town of Mendocino in Mendocino County



OVERHEAD CROSSING of Southern Pacific Railroad on re-aligned U. S. 99
between Weed and Black Butte, Siskiyou County

Diego and the Mexican border, contracts are under way which include the construction of 10 bridges.

Of special interest because of the effect on the number of posted bridges, are contracts along the east shore of the Salton Sea which will eliminate 90 small posted bridges by replacement or reconstruction.

During the 1949-50 Fiscal Year 90 bridge contracts were completed at a cost of \$17,175,000. Bridges in road contracts cost \$2,535,000, making a total of \$19,710,000. On June 30, 1950, going bridge contracts and bridges in road contracts totaled about \$18,000,000.

Federal Aid Secondary

Mutually beneficial close cooperation was continued between the Bridge Department and the various counties in the programming, designing, and construction of a number of bridges under the federal aid secondary program. A total of 28 federal aid secondary bridge contracts involving 29 bridges at an approximate cost of \$3,500,000 in 12 different counties, were in progress during the year.

One of the primary aims of this program is to encourage the counties to do their own work. Eight counties in which work was performed prepared their own plans and furnished their own construction engineering personnel. The class of county work being done under these conditions is excellent.



STEEL GIRDER STRUCTURE to carry Bayshore Freeway, U. S. 101,
traffic over Army Street, San Francisco



STEEL GIRDER CROSSING of the Hollywood Freeway, U. S. 101
at Western Avenue, Los Angeles



AERIAL VIEW OF FOUR-LEVEL STRUCTURE during construction. This structure carries Hollywood Freeway on its upper deck and will serve as the interchange between the Hollywood, Harbor, and Arroyo Seco Freeways in Los Angeles

Railroad Grade Separations and Crossing Protection

On June 30, 1949, there were a total of 15 railroad-highway grade separation structures under contract. Fourteen of these separations were completed during the 1949-50 Fiscal Year, and contracts were awarded for 11 additional overheads and underpasses, making a total of 12 grade separations under construction as of June 30, 1950. Three of the separation contracts awarded during the year eliminated existing grade crossings and the railroads contributed 10 percent of the costs. One separation replaced an existing separation, three separations widened existing structures by either building a new parallel structure or extending or widening an existing structure, and the balance of the four structures were on new alignment, of which one closed an existing underpass.

Flashing light signal installations were completed at nine federal aid secondary grade crossings during the year. Four crossings were added to make a total of 65 crossings on the FAS-1944 protection program, of which two remain to be completed as of June 30, 1950. Four flashing light signals on state highways were programmed from minor improvement and betterment funds on a cooperative basis with the railroad where each is to pay 50 percent of the costs. Three of these installations are completed.

Bridge Maintenance

Under this section comes the periodic inspection and reports covering maintenance, minor improvement and capacity rating of approximately 4,850 state highway bridges and 50 state park bridges. Maintenance repairs and minor replacements not including painting, cost \$264,000 during the 1949-50 Fiscal Year.

A total of 130 county and city bridges were investigated on formal requests from local authorities and 72 of these were posted for restricted loading. Other services included bridge work for Division of Forestry and Division of Fish and Game.

As of June 30, 1949, 277 state highway bridges were posted for restricted load or speed. Due to continuing deterioration of older bridges additional postings were made; however, the number of posted bridges was reduced by construction of new bridges. The greatest step being made in that direction is a project not yet completed of relocation and 18 new bridges which will eliminate 90 old posted bridges. As of June 30, 1950, 231 bridges were posted for restricted load or speed, a reduction of 46 during the year.

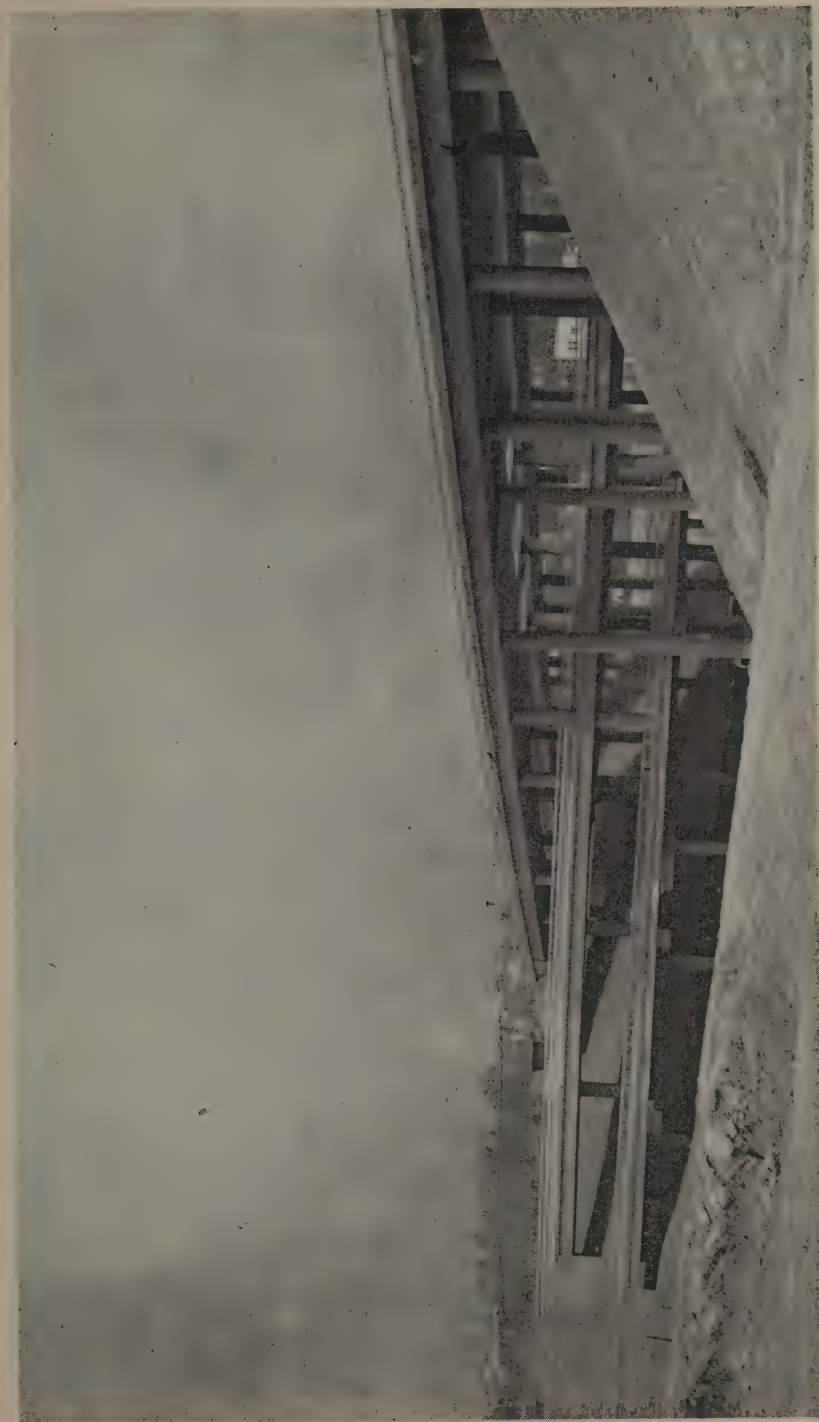
During the last year an improvement was made in filing bridge inventory records. The bridge log and structure list have been coded and transferred to punched cards. Grade crossings are also coded with a punched card for each. Once coded and punched on cards all pertinent information is readily available in practically any combination or grouping desired. For instance, the machines will sort the cards and print lists of all timber bridges or all concrete girder bridges or all bridges over 200 feet in length showing bridge number, location, type, length and width of each. The printed list prepared on the electric tabulating machines has been substituted for the typed and mimeographed bridge lists formerly used. The new system provides more information, quicker and more economically.



STEEL GIRDER BRIDGE, during construction on relocated S. R. 71
across Santa Ana River near Prado Dam, Riverside County



NEW STEEL TRUSS BRIDGE at Stevens Bar on Big Oak Flat Road, S. R. 120,
across Tuolumne River, Tuolumne County



COMPLETED FOUR-LEVEL STRUCTURE at interchange of Hollywood, Arroyo Seco and Harbor Freeways

The accompanying list includes all structures on the State Highway System including the San Francisco-Oakland Bay Bridge. Complex structures are listed by number and length on basis of main span, but areas have been broken down and appear under the various type headings. Areas are based on clear roadway width including sidewalks.

Bridge Maintenance Painting Program

During the past year, 19 steel bridges totaling nearly 7,000 tons were cleaned and painted under 10 different contracts. A separate section under Bridge Maintenance was established to handle programming, field investigation and inspection of steel bridge painting. Careful study of the service lives of various types of paint in various locations has brought out the need for a coordinated program of repainting the more than 400 steel bridges on the highway system. It also has brought about a very large increase in the amount of painting work which is included in the budget, and it is hoped that within a few years the regular maintenance painting of steel structures will be brought to a level where painting can be carried on at an even and more economical rate.

SAN FRANCISCO-OAKLAND BAY BRIDGE AND CARQUINEZ BRIDGE OPERATION AND MAINTENANCE

San Francisco-Oakland Bay Bridge

Traffic and Revenue—The total number of vehicles which crossed the San Francisco-Oakland Bay Bridge between July 1, 1949, and June 30, 1950, was 27,966,514, establishing a new high record and a gain of 4.79 percent as compared to the 26,686,901 vehicles of the preceding fiscal year. The daily average was 76,621 vehicles.

Other previous traffic records were broken in June, 1950, with an average of 82,819 vehicles per day and a new record for a single day's traffic was made with 96,079 vehicles on June 16th. Two days in June had totals in excess of 90,000, the traffic for June 30th being 91,356 vehicles.

A total of 19,105,982 toll-paying interurban train and bus passengers crossed the bridge during the year, a decrease of 14.05 percent in comparison with the record of the preceding year.

The revenue derived from vehicular tolls, interurban train passenger tolls, rents, interest and miscellaneous services (exclusive of collections for roadside and tow services) was \$8,742,262.99. This was an increase of \$319,844.54 as compared with the previous fiscal year.

No changes in toll rates were made during the year.

Financing—Bond retirements during the year totaled \$7,912,000, of which \$2,315,000 represented bonds maturing on September 1, 1949, and March 1, 1950; and \$5,597,000 represented sinking fund and serial bonds called in advance of their maturity dates. The bonded indebtedness at the end of the fiscal year was \$19,840,000.

Bridge Maintenance—The bridge painting crew consisted of two foremen, six leadingmen, and average of 55 painters, two laborers, and four highway equipment operator-laborers, which constituted an increase of about 20 percent over the crew of the previous fiscal year.



SINGLE PEDESTAL CONCRETE GIRDER BRIDGE carrying State Highway, S. R. 96, across Clear Creek in Siskiyou County



TIMBER TRESTLE BRIDGE on Coastal Highway, S. R. 1, at north limits of Fort Bragg in Mendocino County

Final coat painting was finished on main cables and hanger ropes on the West Bay suspension spans on November 17, 1949, thus for the time being removing the hazard to upperdeck bridge traffic from overhead painting. Principal painting activity in the West Bay spans was on truss chords and web members, and in the East Bay spans on the cantilever upperdeck floor system, and on truss web members between decks for the cantilever and 500-foot spans. In addition to necessary preparatory operations, bridge painters applied some 9,800 gallons of paint to structure surface during the year. This represents about one-seventh of the estimated amount used in one cycle of maintenance painting for the entire bridge.

An added activity for a portion of the paint crew was the redecorating of the interior of the Annex Building which is the headquarters for the Bay Bridge Detail of the California Highway Patrol.

An additional 1,000 feet of track for the upper-deck traveler was installed on the cantilever bridge during the year. Bids for furnishing and installing 2,320 feet of similar trackage and two upper-deck travelers on the West Bay Crossing were opened on June 14, 1950, and it is expected that work will be started on this contract shortly after the beginning of the new fiscal year. Two scaffolds to be used when painting the webs of the 288-foot deck truss spans were also purchased during the year.

The total amount expended on painting, including scaffolds, traveling platforms, and track was \$355,579.45.

The steadily increasing volume of vehicular traffic made it necessary to maintain emergency service at a high level. The emergency fleet consisted of five tow trucks, four emergency pickup trucks operated during peak hours, and a fire truck. An important item in maintaining the efficiency and mobility of the emergency service department has been the two-way frequency-modulated radio telephone system which has now been in use on the bridge for about three years.

Structure Maintenance—Repairs to the timber fender of Pier W-5, which was damaged extensively when a ship collided with it on January 12, 1949, were completed and a satisfactory settlement made with the shipping company and its insurance carrier for assuming their allocation of the costs of repair.

Minor damage to the lower-deck floor beam at Panel Point 6 of Span E-7 was suffered on November 9, 1949, as a result of the short circuiting of an electric cable of the Bridge Railway. Repairs were satisfactorily completed within 11 days of the date of the damage. The repair work was done by contract.

No other unusual problems of structural maintenance occurred.

Traffic Studies—As in previous years, traffic lane counts on the upper deck by means of automatic counters were taken at intervals during the year. Special semiannual counts were made on Sunday and Monday, July 17, and July 18, 1949, and Sunday and Monday, January 15, and January 16, 1950. These semiannual counts were made at the toll plaza and at the road connections to Yerba Buena and Treasure Islands, and were in addition to the regular counts made by the automatic

traffic counters. Other special counts and studies of traffic problems were made during the year as circumstances dictated.

New traffic regulations relating to lane usage on the upper deck were placed in effect on December 18, 1949. The speed limit on the upper deck was lowered to 40 miles per hour with the installation of appropriate signs on June 21, 1950.

Toll Collection—Four new tollbooths for the accommodation of westbound lower-deck traffic were placed in operation on September 1, 1949, providing a substantial enlargement of the toll collection facilities. Additional toll collectors were employed to man the new booths. The operation of the new lanes has been very satisfactory both to the bridge management and the bridge user. New toll registration and collection equipment previously ordered was installed during the year in the passenger lanes but, because of delays in delivery, installation in the freight lanes had not been completed at the end of the fiscal year.

Accounts Audited—The San Francisco-Oakland Bay Bridge accounts for the fiscal year ended February 28, 1950, were audited and found to be in good order.

Tabulations—Data on bridge traffic, revenues, and finances are shown in the appended tabulations (Tables I to IV, inclusive).

TABLE I—SAN FRANCISCO-OAKLAND BAY BRIDGE
EXPENSE OF MAINTENANCE AND OPERATION

Fiscal Year, July 1, 1949, to June 30, 1950

Administration expense.....	\$39,740.21	
Supervising engineer and staff (maintenance).....	27,832.44	
Bridge structure, maintenance and repair.....	33,162.90	
Painting, maintenance and repair.....	355,579.45	
Roadway, fire and tow service.....	110,785.55	
Electrical energy, power and light.....	13,773.82	
Electrical and signal, maintenance and repair.....	56,398.26	
Administration building, maintenance and repair.....	19,418.63	
Roadway, maintenance and repair.....	36,048.06	
Shop and garage.....	5,608.49	
Toll collection.....	376,352.33	
Accounting office, staff and supplies.....	94,196.34	
Auditing.....	1,761.08	
Printing.....	9,832.25	
Traffic engineering.....	14,299.15	
		\$1,194,788.96
Insurance		
Bridge structure and physical damage.....	\$112,875.60	
Bonding and burglary.....	192.81	
Compensation.....	5,498.46	
Retirement.....	70,112.72	
		188,679.59
Suspense items to be rebilled or transferred.....	\$101.79	
		101.79
Total.....		\$1,383,570.34

**TABLE II—SAN FRANCISCO-OAKLAND BAY BRIDGE
FINANCIAL AND REVENUE ACCOUNT**

Revenue

	Fiscal Year July 1, 1949 to June 30, 1950	Nov. 12, 1936 to June 30, 1950
Traffic tolls.....	\$8,276,196.68	\$83,190,628.06
Train passenger tolls.....	221,990.84	4,777,586.57
Total toll revenue.....	\$8,498,187.52	\$87,968,214.63
Rents from concessions.....	164,142.60	1,408,145.86
Investment and profit, reserve and maturity fund investments.....	80,000.00	804,083.22
Interest on time deposits.....	.00	37,806.79
Over and short account.....	-67.13	4,435.10
	\$8,742,262.99	\$90,222,685.60
Commute suspense.....	-2,136.00	7,650.00
Scrip suspense.....	25.25	7,911.80
Damage claim recovery suspense.....	.00	50,000.10
	\$8,740,152.24	\$90,288,247.50
Balance June 30, 1949.....	7,260,741.25	.00
	\$16,000,893.49	\$90,288,247.50

Disbursements

Interest paid on outstanding bonds.....	\$569,355.00	\$25,744,521.52
Bonds redeemed.....	7,912,000.00	52,700,000.00
Redemption premium on bonds.....	139,925.00	4,218,215.00
C. T. B. A. expense.....	.00	153,478.68
Special legal expense.....	25,000.00	25,000.00
Fiscal agents' expense.....	18,865.32	285,370.65
Transfer from American Trust Company (refinancing).....	.00	-107,643.26
Registration, paying and collection agents' expense.....	7,857.95	122,653.77
Use and occupancy insurance.....	.00	225,794.01
Counterfeits, mutilated coins and uncollectibles.....	13.15	1,621.48
From construction fund.....	.00	-429,166.67
Miscellaneous revenue adjustments.....	.00	20,525.25
	\$8,673,016.42	\$82,960,370.43
Funds on hand June 30, 1950		
Accounts receivable.....	140,599.49	140,599.49
Cashier's revenue fund.....	51,582.99	51,582.99
Cashier's change fund.....	20,000.00	20,000.00
	\$212,182.48	\$212,182.48
Funds in hands of fiscal agents		
Anglo California National Bank.....	\$1,531,721.63	\$1,531,721.63
Bank of America, N. T. & S. A.....	1,583,972.96	1,583,972.96
	\$3,115,694.59	\$3,115,694.59
Investments		
2 percent treasury bonds.....	\$4,000,000.00	\$4,000,000.00
Total funds on hand June 30, 1950.....	\$7,327,877.07	\$7,327,877.07
	\$16,000,893.49	\$90,288,247.50

TABLE III—SAN FRANCISCO-OAKLAND BAY BRIDGE
CONSOLIDATED BALANCE SHEET AS OF JUNE 30, 1950

Assets		
Current assets		
Cash (available)		\$51,582.99
Cash (change fund)		20,000.00
Construction fund (State Treasury)		40,013.03
Toll revenue fund (fiscal and subfiscal agents)		
Anglo California National Bank	1,531,721.63	
Bank of America, N. T. & S. A.	1,583,972.96	
Investments		
2 percent U. S. Treasury bonds	4,000,000.00	
Accrued interest	23,260.87	
Accounts receivable	140,599.49	
Credit account deposits	41,896.00	
		<u>\$7,433,046.97</u>
Fixed assets		
Investment in bridge (vehicular)	\$54,768,809.10	
Investment in bridge (interurban)	18,318,305.81	
Investment in bridge (Port of Oakland overhead)	443,508.44	
Investment in bridge (approaches)	6,288,550.41	
Investment in bridge (improvement in facilities)	435,355.50	
	<u>\$80,254,529.26</u>	
Retirement of fixed assets		
Vehicular	\$106,766.06	
Interurban	3,399,003.31	<u>—3,505,769.37</u>
		<u>\$76,748,759.89</u>
Deferred charges		
Prepaid use and occupancy insurance		15,866.82
Total assets		<u>\$84,197,673.68</u>
Liabilities and Excess		
Fixed liabilities		
Bonded debt		
Serial revenue, 2 percent	\$19,840,000.00	
		<u>\$19,840,000.00</u>
Deferred liabilities		
Scrip suspense	\$7,911.80	
Commute suspense	7,650.00	
Accrued interest on bonds, 2 percent	132,629.03	
Accrued expenses	7,389.75	
		<u>\$155,580.58</u>
Construction fund		40,013.03
Liability to State Highway Fund for approaches		6,288,550.41
Liability for credit account deposits		41,896.00
Damage claim recovery suspense		50,000.10
Total liabilities		<u>\$26,416,040.12</u>
Excess of assets over liabilities		57,781,633.56
		<u>\$84,197,673.68</u>

TABLE IV—SAN FRANCISCO-OAKLAND BAY BRIDGE
CLASSIFICATION OF VEHICLES

Period	Automobiles, automobile trailers and light commercial vehicles		Busses	Trucks and truck trailers	Motorcycles and tri-cars	Total toll vehicles	Free vehicles	Total vehicles
	Cash toll	Commutes						
November 12, 1936 to June 30, 1948.....	161,061,713	18,887,508	4,755,138	12,535,190	623,574	197,803,223	10,993,593	208,856,816
July 1, 1948 to June 30, 1949.....	21,161,356	2,272,707	482,308	1,959,639	62,542	25,938,552	748,349	26,686,901
July, 1949.....	1,917,995	165,221	37,066	164,887	6,298	2,291,377	61,098	2,352,475
August, 1949.....	1,983,229	180,650	39,076	187,202	5,485	2,395,642	66,245	2,461,887
September, 1949.....	1,914,213	167,329	34,687	175,739	5,833	2,297,801	62,188	2,359,989
October, 1949.....	1,883,706	202,702	34,621	185,644	4,926	2,311,599	62,039	2,373,638
November, 1949.....	1,792,164	204,931	33,634	175,812	4,410	2,210,951	60,375	2,271,326
December, 1949.....	1,830,479	190,544	33,904	170,921	3,593	2,229,441	63,820	2,293,261
January, 1950.....	1,678,099	192,541	32,538	160,113	2,538	2,065,829	62,197	2,128,026
February, 1950.....	1,665,495	176,466	29,871	153,424	3,158	2,028,414	58,710	2,087,124
March, 1950.....	1,818,312	229,307	33,903	184,929	3,826	2,270,277	66,262	2,336,539
April, 1950.....	1,879,786	200,100	31,798	171,415	4,533	2,287,632	61,406	2,349,038
May, 1950.....	1,855,548	217,627	35,262	188,677	4,595	2,404,709	66,925	2,471,634
June, 1950.....	1,995,378	187,826	35,669	192,964	5,010	2,416,817	67,730	2,484,577
Totals—July 1, 1949 to June 30, 1950.....	22,317,314	2,315,244	412,029	2,111,727	54,205	27,210,519	755,995	27,966,514
Totals since opening of bridge on November 12, 1936.....	204,540,383	23,475,459	5,649,475	16,006,556	740,421	251,012,294	12,497,937	263,510,231

Carquinez Bridge

Maintenance—As in previous years, structural maintenance, including the maintenance of the marine and aerial signals on Carquinez Bridge, was continued under the jurisdiction of the San Francisco-Oakland Bay Bridge organization. During the year covered by this report, the physical damage insurance premiums on both Carquinez and Antioch Bridges were added to the Carquinez Bridge maintenance work order. Roadway maintenance was handled by District X.

The principal item of maintenance during the year was the continuing painting of the bridge structure. During most of the year the painting crew consisted of one foreman and eight painters.

Because of navigation requirements, it was necessary to maintain a 24-hour watchman service at the bridge in order to keep navigation lights on at all necessary times and to operate fog signals whenever required.

The total maintenance cost during the year, including physical damage insurance, both on Carquinez Bridge and on Antioch Bridge, was \$90,883.86, paid from the State Highway Fund.

As in the past, several items of improvement or special maintenance on both Carquinez and Antioch Bridges were financed from the Carquinez Bridge Revenue Account. Three of these projects are mentioned in the following paragraphs. Others not receiving specific mention will be found listed in the appended Table VI.

A contract was awarded and completed for the removal of the state-owned 2,300-volt power line formerly supported on the east truss of the bridge and the substitution therefor of a cable enclosed in conduit under the east sidewalk. This effected the elimination of a potential hazard to bridge maintenance crews, especially structural steel painters, and thus resulted in an improvement in employee safety. The total cost was \$8,966.95.

A lightning storm on January 13, 1950, caused severe damage to the main transformer bank necessitating the replacement of the transformers. The replacement was effected at a cost of \$578.82.

In order to comply with navigation requirements, it was necessary to install certain navigation lights and access walkways on the timber fender which had been built at Pier 4 during the preceding fiscal year. This installation was completed in June, 1950, at a cost of \$1,003.31 and like the other work mentioned was paid from the Carquinez Bridge Revenue Account.

Tabulations—Data on the maintenance expenses at Carquinez Bridge and on expenditures from the Carquinez Bridge Revenue Account are furnished in the appended tabulations (Tables V and VI).

TABLE V—CARQUINEZ BRIDGE
*** MAINTENANCE EXPENDITURES—STATE HIGHWAY FUND**
July 1, 1949, to June 30, 1950

Administration, engineering and accounting.....	\$3,289.24
Marine and aerial signals.....	11,843.62
Bridge structure.....	140.80
Painting.....	53,181.70
Building maintenance.....	5,296.94
Physical Damage insurance, Carquinez Bridge.....	12,540.00
Physical Damage insurance, Antioch Bridge.....	4,591.56
Total.....	\$90,883.86

* Including Antioch Bridge physical damage insurance.

TABLE VI—CARQUINEZ BRIDGE REVENUE ACCOUNT

Balance June 30, 1949.....	\$111,424.99	
		\$111,424.99
Expenditures		
Work Order COF-6, Lift span, Antioch.....	\$458.52	
Work Order COF-13, Power line, Preliminary Engineering, Carquinez.....	162.79	
Work Order COFC-2, Fender repair, Carquinez.....	27,308.26	
Work Order COFC-3, Painting, Antioch.....	28,009.66	
Work Order COFC-4, Power line, Carquinez.....	8,804.16	
Work Order COF-15, Navigation lights, Carquinez.....	981.31	
Work Order COF-16, Transformers, Carquinez.....	578.82	
		66,303.52
Balance before deducting unexpended balance of current work orders.....		\$45,121.47
Unexpended balances of current work orders		
Work Order COF-14, Bridge repair, Antioch.....	\$1,000.00	
Work Order COF-15, Navigation lights, Carquinez.....	118.69	
		1,118.69
June 30, 1950, balance available for future work orders.....		\$44,002.78

PERSONNEL

SERVICE AGREEMENTS AND PREVAILING WAGES

Recruiting

During the Fiscal Year 1949-50, the expanded design and construction program of the Division of Highways emphasized the fact that experienced personnel was lacking in all grades, especially at the associate highway engineer level and below.

A survey of the highway engineering employment field indicated that this shortage was widespread, not being confined to California alone. It was therefore determined that the engineering needs could probably be met only through an extensive recruitment of junior civil engineers.

A program was therefore started during the summer of 1950 to immediately obtain 300 junior civil engineers. Approximately 150 of this classification were recruited by June 30. Another recruitment drive is proposed during the fall and winter to employ the needed personnel.

The division now employs slightly over 2,800 engineers, with a total personnel of more than 7,200.

Training

The veterans on-the-job training program has been continued throughout the year, and at this time the registration of employees in the program has decreased from 60 to approximately 50 veterans.

The fact that there is a serious shortage of experienced engineers throughout the division has created the necessity for an accelerated development of the young men who have entered the division as junior civil engineers since the war. The only reasonable method of accelerating the professional development of an engineer is through a method of systematic in-service training to supplement the normal experience he receives on the job. The department is, therefore, developing such a program.

The prime objectives of this training program are to promote a broader understanding of the general aspects of the highway program, broaden the base of experience of the employee, and at the same time conduct these operations without interfering with the normal operations of the department.

These objectives can only be accomplished through vigilance and effort on the part of supervisory personnel, so as to develop their juniors without an undue reduction in production capacity.

Training of engineering personnel during the past year has been carried on throughout the division by classes initiated by employee groups for civil service and professional registration examinations.



TYPICAL SCENIC VIEW OF THE PACIFIC OCEAN from State Sign Route 1, Mendocino County

Appointments and Separations

On January 1, 1948, the division had a total of 6,053 employees. By July 1, 1948, the number had increased to 7,186 and has not been below 7,100 since that time. The more stable employment conditions existing during the calendar year 1949 are reflected in the following figures:

	1948	1949
Number of civil service appointments.....	2,645	2,181
Number of temporary authorization appointments.....	2,588	745
Separations (principally resignations).....	2,656	1,797

Disciplinary Actions

During 1949 only one employee with permanent status was dismissed. Seven limited-term employees were dismissed and 24 probationers were rejected. Three employees received disciplinary demotions on a permanent basis and one employee was demoted for a temporary period. Sixteen employees received disciplinary suspensions for periods of less than 30 days.

In October, 1949, a summary was issued outlining procedures for punitive action authorized by the Government Code including rejection during probation, dismissal, suspension, demotion, and reprimand. The interpretations of the causes for disciplinary action and samples of the forms to be used should be helpful in understanding this phase of civil service.

Retirement

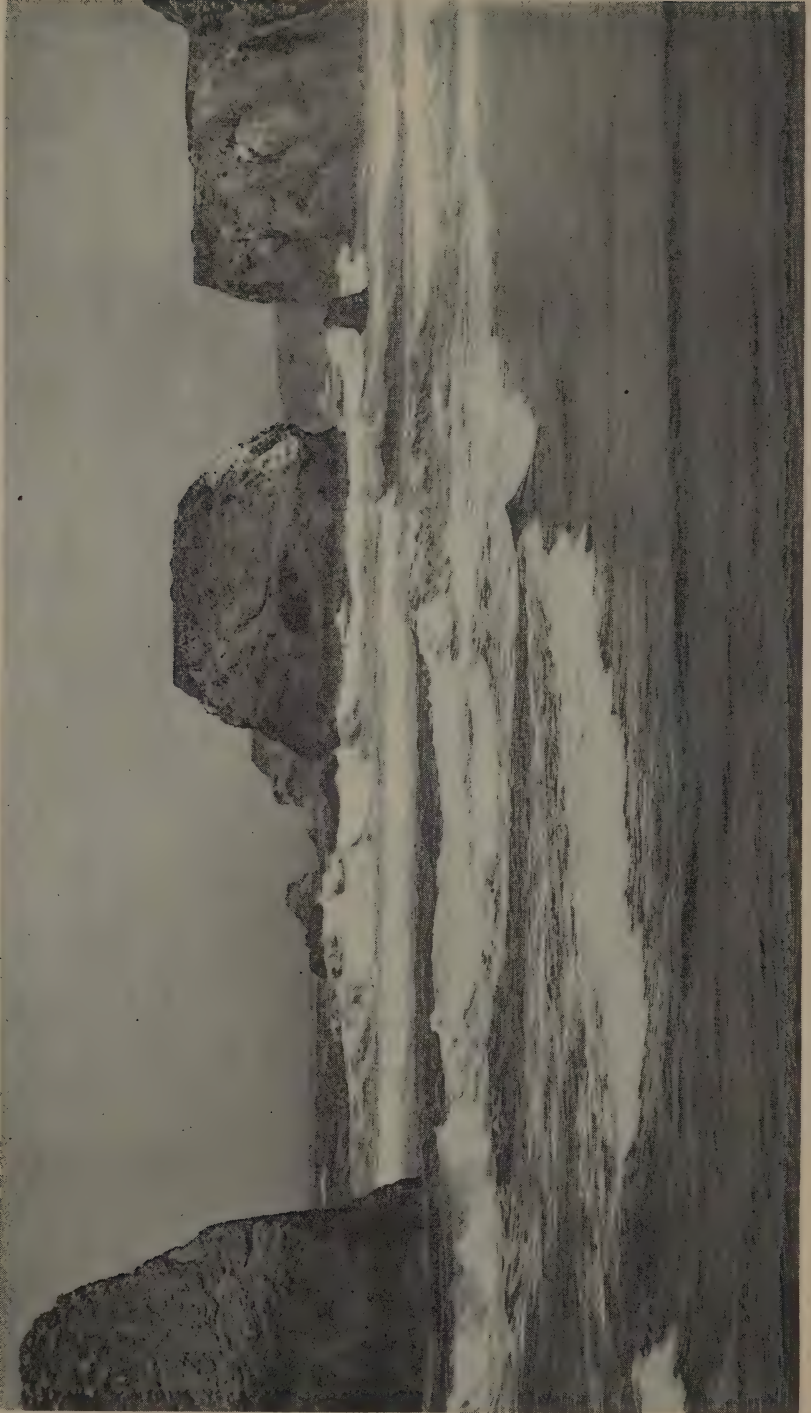
During 1949, 48 Division of Highways employees were retired. The number of retirements was no doubt influenced by the increased retirement benefits provided by the 1947 Legislature.

Service Agreements and Miscellaneous Small Contracts

Over 100 small contracts or service agreements for clearing of right of way were approved, and 64 of these completed. A total of 4,147 service agreements were issued for equipment rental and other types of service.

Prevailing Wages and Labor Relations

The Prevailing Wage Law dictates that the department advertising public works for contract must determine and specify the minimum wages to be paid for contract work. These wages must be incorporated in contract advertisements and proposals for work. There was no change during the past year in the methods used in determining the prevailing wages; that is, the acceptance of labor agreements and use of wage surveys for particular areas.



MENDOCINO COUNTY COAST as viewed from State Sign Route 1

RIGHT OF WAY

During the Fiscal Year 1949-50 the Right of Way Department completed the preparation and distribution of the first edition of the Right of Way Manual and accompanying Right of Way Form Book. This new manual and form book has received very high commendation from educators, administrators, and land acquisition agencies throughout the Nation, and represents a long step forward in synchronizing the right of way acquisition work of the Division of Highways on a state-wide basis, and even more important, clearly presents the policy and procedure of the Division of Highways in connection with land acquisition work.

During the last year, the Educational In-training Program to better equip right-of-way personnel in the work they are called upon to perform and to improve the technique and efficiency of the department, has been carried on and materially expanded. The department through the Educational In-training Program has continued to improve the technique of the appraisal section to the end that appraisals prepared to determine the fair market value of land taken and damages, if any, are universally recognized as being sound, accurate, and fair.

The prenegotiation appraisal procedure results in every property owner being offered the fair market value to which he is entitled with offers of settlement being made on the same fair and equitable foundation not only on an individual project but also on a county-wide and state-wide basis.

Economic studies have been considerably expanded. Numerous studies were completed to determine the economic effect of freeway and expressway construction upon abutting and contiguous properties, the effect of freeway construction by-passing the business districts of communities and cities, and the effect in rural areas of moving back roadside business establishments that formerly had unlimited access to the through lanes of traffic, so that they now front upon and have access to a frontage road (outer highway), which usually connects to the through lanes of traffic at intersecting cross roads.

These land economic studies will be continued for an indefinite period of time, and as rapidly as new freeways and expressways have been in operation a sufficient length of time to permit accurate studies to determine what the "after" effects have been as compared to economic conditions prior to construction of the highway improvement, the studies will be completed and released to the public.

During the past year public relations activities of the Right of Way Department have been materially expanded and right-of-way personnel have made public appearances throughout the State, as often as the

burden of work would permit, in order to acquaint the general public with policy, procedure, and operations in state highway right-of-way acquisition.

The following is a tabulation of right-of-way acquisition work handled during the last fiscal year :

Total transactions for state highway right-of-way acquisition.....	2,879
Total parcels acquired (buildings and plants) Division of Highways	49
Total parcels acquired for other state agencies (this land acquisition work handled under contractual agreement with State Public Works Board)	118
Total agreements negotiated with public utilities (Streets and Highways Code Sections 702, 703, 704)	281
Total parcels acquired through eminent domain proceedings.....	133
Total expenditure for right-of-way acquisition—Division of Highways	\$24,439,017
Total expenditures and parcels for land acquisition for State Public Works Board	\$4,631,560
Department of Agriculture.....	4 parcels
Department of Education.....	24 parcels
Department of Employment.....	3 parcels
Department of Finance.....	11 parcels
Department of Mental Hygiene.....	9 parcels
Department of Motor Vehicles.....	41 parcels
Department of Natural Resources.....	7 parcels
Department of Public Health.....	1 parcel
California Highway Patrol	1 parcel
California Youth Authority.....	2 parcels
State Agricultural Society.....	2 parcels
Sixth District Agricultural Assn.....	13 parcels
Total expenditures for Division of Highways for miscellaneous acquisition including maintenance sites, district office shops, district office sites, borrow pits, etc.....	\$282,265

As of the end of the fiscal year, June 30, 1950, deferred obligations remained to be paid in the amount of \$2,051,152 (this item includes: (a) amounts withheld until certain obligations have been completed by the state's grantors, (b) payments for moving of improvements in cases where work was not yet completed, (c) payments to utility companies both publicly and privately owned, in cases where cost of such moving was a state obligation).

Total appraised value of parcels under condemnation in eminent domain proceedings at termination of the year, was \$2,791,134.

Due to the continuing inflationary trend in the real estate market, right-of-way negotiations with affected property owners during the past year were carried on under more difficult and adverse conditions than ever before in the history of the department. Notwithstanding this fact, 2,759 parcels were acquired through negotiated settlements and only 133 parcels through eminent domain proceedings. Of the 133 parcels acquired through eminent domain proceedings, approximately 40 percent represented stipulated judgments, in other words, an agreed price between the State and grantor under conditions in which the grantor was unable to clear title through any other legal procedure.

LEGAL

The legal work of the department has been increasing because of expanded right-of-way and construction programs. The acquisition of right of way through improved areas results in many legal problems, not only with regard to acquisition of property, access rights, and claims for consequential damage, but because of complicated relocations of utility facilities.

Several significant decisions have been handed down by the appellate courts with regard to highway work and condemnation.

Perhaps the most important of these is *Holloway v. Purcell*, 35 A. C. 226. That case involved the legality of realignment of a portion of Route 3 between the northern end of the North Sacramento Freeway and the City of Roseville, and the proposed construction of the realigned portion as a freeway. Several property owners along the existing route sought an injunction against the Highway Commission and officials of the department which would have prevented any substantial departure from the existing alignment. Their first contention was that Route 3 was an original "bond act" road, that is, it was laid out and constructed with money obtained from the sale of highway bonds, of which there were three successive issues in 1909, 1915, and 1919, and that highways constructed with such money could not be changed in location prior to the time all of the bonds were paid off. Their second main contention was that the Freeway Law of California was unconstitutional in that the provisions of Section 36 of Article IV of the State Constitution, granting the authority to establish the State Highway System, must be strictly construed and therefore only the types of highways which were commonly known and recognized in 1902 could now be built. The Supreme Court in a sweeping decision upheld not only the right of the Highway Commission and the Department of Public Works to improve and realign the state highway routes specified by law, but upheld completely the constitutionality of the freeway law. A rehearing was applied for, but denied. Although formal application has not yet been made, we are advised that the property owners may seek a hearing of the case by the Supreme Court of the United States.

In the Third Annual Report reference was made to the case of *Holman v. State of California*, 97 A. C. A. 282, involving the right of an abutting property owner to claim compensation by reason of the construction of a central dividing strip in the highway upon which his property abuts. The trial court in that case sustained a demurrer and dismissed the case, holding that such damages, if any, were noncompensable.

The District Court of Appeal, Fourth Appellate District, affirmed the decision of the trial court, and the Supreme Court of the State denied a hearing, thus rendering the decision final.

This case represents an important step in highway development in that the regulation of the flow of traffic by means of physical barriers and other devices constitutes a regulatory measure under the police power in the same category as laws and ordinances providing for one-way streets, prohibition of turns, etc. The decision should be of great benefit in achieving highway safety.

Some idea of the volume of condemnation work is given by the fact that during the year 254 proceedings, involving 2,370 parcels of land and 5,996 defendants, were filed. Approximately 58 of these proceedings were filed by the Los Angeles Office, 185 by the San Francisco Office, and the remainder by the Sacramento Office. Condemnation proceedings are not filed until negotiations have been attempted with every property owner involved. In this respect state highway acquisitions differ from those of the Federal Government, which often files condemnation proceedings covering all property required, with no attempt to reach settlements before filing the proceedings. During the year 81 contested trials were conducted, involving 108 parcels of land and awards in the amount of \$1,613,050.05.

An increasing number of claims against the State by reason of the activities of the department are being filed before the State Board of Control. During the last fiscal year a total of 79 claims, involving \$887,362.17, were filed; 63 claims have been acted on by the board, in which a total allowance of \$18,487.39 based on 30 claims was allowed, the rest of those being acted on—33 claims involving \$683,335.87—having been denied.

Due to the increased construction program and the uncertainties created by the present international situation a considerable increase in the legal work involving construction contracts and contractors' claims may be anticipated. The right-of-way acquisition program is still expanding and every evidence of increased legal work is present.

ACCOUNTING

Revenues and Expenditures

Total normal revenues of the Division of Highways for the fiscal year ending June 30, 1950, amounted to \$158,235,845.81. Expenditures for the same period totaled \$145,283,830.86.

Cash Resources and Obligations

On June 30, 1950, the cash balance in the State Highway Fund, less approved claims not yet paid by the State Controller, was \$47,655,-685.67. Of this amount \$5,795,608.07 was in the form of deposits or transfers from other state funds for particular projects which are not a part of the regular state highway program, \$261,078.31 represented cash on hand to meet obligations in connection with the county highway program, and \$5,596,479.61 represented the unexpended balance of funds available for expenditure on city streets, in accordance with Section 194 of the Streets and Highways Code. Cash resources available to meet obligations of the regular state highway program, therefore, amounted to \$36,002,519.68. As of the same date, June 30, 1950, there were obligations outstanding in the form of going construction projects amounting to \$49,400,600.32. Of this amount \$8,955,946.22 represented contracts relating to projects of the 1950-51 Fiscal Year which had been awarded prior to June 30, 1950, in accordance with the provisions of Section 143.1 of the Streets and Highways Code.

Revisions in Accounting Procedure

The accounting system of the Division of Highways is continually undergoing revision to meet changing conditions or to improve existing methods. The following are some of the more important changes that have taken place during the 1949-50 Fiscal Year.

1. Cash accounting procedures, both with respect to revolving funds and revenue collections have been revised to conform with the Central State Treasury Bank Account System established by Section 16305.3 and other related sections of the Government Code enacted by the 1949 Legislature.

2. Improvements have been made in the right-of-way accounting procedure to provide dual control by both the Right of Way Department and the Accounting Department over the right-of-way program and expenditures.

3. The budgetary and proprietary accounts have been integrated in a single set of accounts to provide more comprehensive budgetary and financial reports.

4. A revised method of summarizing the district budgetary reports has been developed, decreasing the clerical effort involved by 75 percent.

5. The land and building accounting procedure has been expanded to provide better information as to land cost, value of improvements, and maintenance and repair costs.

6. A procedure has been established to account for nonrental equipment and a completely new inventory system is in process of installation which will provide adequate control over equipment of this type and will greatly facilitate the taking and reporting of annual inventories.

Accounting and Financial Statements

Included as Appendix A of this report are statements reflecting the financial condition of the Division of Highways as of June 30, 1950, and tables classifying revenues and expenditures to date and for the year ending June 30, 1950.

APPENDIX A

ACCOUNTING AND FINANCIAL STATEMENTS

1. Statement of Financial Condition as of June 30, 1950.
 2. Statement of Receipts and Disbursements and Budgetary Resources and Obligations, July 1, 1949 to June 30, 1950.
 3. Analysis of Income Received by Division of Highways by Fiscal Years to June 30, 1950.
 4. Analysis of Federal Government Funds Received by Division of Highways by Fiscal Years to June 30, 1950.
 5. Expenditures by Division of Highways to June 30, 1950, Classified as to Function.
 6. Expenditure by Division of Highways by Fiscal Years to June 30, 1950, Classified as to Location and Purpose.
 7. Statement of Expenditures in Counties for Construction, Reconstruction, Improvements, and Maintenance and Contributions Received in Connection therewith, January 1, 1912 to June 30, 1950.
 8. Statements of Budgetary Transactions as of June 30, 1950.
 - (a) State Highway Operating Budget—1950-1951 Fiscal Year.
 - (b) State Highway Operating Budget—1949-1950 Fiscal Year.
 - (c) State Highway Operating Budget—1948-1949 Fiscal Year.
 - (d) State Highway Operating Budget—1947-1948 Fiscal Year.
 - (e) County Highway Budget—Continuous.
 - (f) County Highway Budget—Prior.
 - (g) Access Highways Budget.
 - (h) Grade Separations Operating Budget.
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**DEPARTMENT OF PUBLIC WORKS, DIVISION OF HIGHWAYS
STATEMENT OF FINANCIAL CONDITION AS OF JUNE 30, 1950**

Assets and Budgetary Resources

Cash:		
Cash state	\$1,223,621.07	
Cash suspense	122,433.12	
Revolving fund	3,500,000.00	
	<u>\$4,846,054.19</u>	
Less advance to Convict Camp Fund	70,000.00	\$4,776,054.19
State Highway Fund:		
In treasury	\$47,655,685.67	
Warrants receivable	8,596,863.42	56,252,549.09
Toll Bridge Authority Revolving Fund:		
In treasury	\$1,097.22	
Reimbursable expenditures	48,902.78	50,000.00
Advance to Convict Camp Fund		70,000.00
Court deposits in condemnation proceedings		3,194,563.05
Receivables:		
Accounts receivable	\$3,937,789.22	
Charges in process of billing	47,594.93	
War damage claims	852,481.65	4,837,865.80
Loan to California Toll Bridge Authority, Chapters 5 and 24, Statutes 1933		6,288,550.41
Loan to Division of Toll Crossings, Chapter 700, Statutes 1949		915,364.92
Stores:		
Equipment Department	\$555,197.41	
District offices	831,172.36	
Warehouses	1,148,497.38	2,534,867.15
Land and buildings		8,530,480.90
Equipment:		
Construction and automotive	\$13,997,468.15	
Less reserve for depreciation	6,290,267.69	
	<u>\$7,707,200.46</u>	
Office, shop, and miscellaneous	3,712,578.06	11,419,778.52
Suspense and deferred items:		
Building operation suspense	—\$34,156.88	
Equipment operation suspense	—9,018.33	
Clearing account	361,337.43	
Unapplied laboratory credits	—71,897.68	
Equipment department current account	359,990.99	
Advance to Architectural Revolving Fund	19,624.00	
Prepaid Bay Bridge insurance	222,726.38	
Undistributed payrolls	76,565.42	
Staff payroll adjustment	60,127.55	
Construction sign suspense	6,629.53	991,928.41
Estimated revenue:		
Federal aid—		
In process of collection	\$1,126,017.79	
Under agreement	12,872,027.19	
Work programed and agreements pending	21,207,351.86	
Work to be programed	2,424,233.70	
	<u>\$37,629,630.54</u>	
Total federal aid	129,695,856.00	
Highway users tax	60,000.00	
Outdoor advertising fees	1,156,140.43	
Work for other state agencies	2,797,534.47	\$171,339,161.44
Contributions		
Total assets and budget resources		\$271,201,163.88

* Includes Federal Aid of \$15,828,919, Highway Users Tax Revenue of \$129,695,856 and Outdoor Advertising Fees of \$60,000 applying to 1950-1951 Fiscal Year state highway budget. Budget for the 1950-1951 Fiscal Year taken into account as of April 1, 1950, in order to permit awarding of construction contracts as authorized by Section 143.1 of the Streets and Highways Code.

DEPARTMENT OF PUBLIC WORKS, DIVISION OF HIGHWAYS
STATEMENT OF FINANCIAL CONDITION AS OF JUNE 30, 1950—Continued

Liabilities, Reserves, Budgetary Obligations, and Surplus

Liabilities:		
Schedules payable.....	\$8,596,863.42	
Invoices pending—shops.....	49,879.21	
Sales tax collected.....	4,297.49	
Estimated liability for support of other departments.....	205,000.00	
Retirement contributions due.....	343,385.35	\$9,199,425.47
Reserves for:		
Compensation insurance, vacation and sick leave, overtime.....	\$683,262.86	
Loan to California Toll Bridge Authority, Chapters 5 and 24, Statutes 1933..	6,288,550.41	
Loan to Division of Toll Crossings, Chapter 700, Statutes 1949.....	893,049.00	7,864,862.27
Deferred items:		
Uncollected damage claims.....	\$18,920.10	
Uncollected contributions.....	3,628,382.13	
Uncollected war damage claims.....	852,481.65	
Uncleared collections.....	1,223,621.07	
Cash suspense.....	122,433.12	
Windy Point Dam deposit, Chapter 19/1947.....	795,608.07	
Golden Gate Bridge Approach deposit, Chapter 1505/45.....	5,000,000.00	11,641,446.14
State's investment in capital assets.....		19,950,259.42
Budget allocations:		
Liability for uncompleted state highway budget contracts.....	\$46,724,671.02	
Liability for uncompleted special budget contracts.....	2,675,929.30	
Encumbrances for operating functions, engineering, and maintenance.....	33,094,515.15	
Total encumbrances.....	\$82,495,115.47	
Budget allotments unencumbered.....	108,248,370.05	^b 190,743,485.52
Estimated unbudgeted surplus.....		^c 31,801,685.06
Total liabilities, reserves, budget obligations, and surplus.....		\$271,201,163.88

Trust Group

Assets		
Cash in banks:		
Withheld from contract payments to protect claims.....	\$208,482.29	
Convict Camp Fund.....	43,480.81	
Prisoners' Trust Fund.....	20,945.79	
Securities held in trust.....	4,500.00	\$277,408.89
Funds in State Treasury:		
Unclaimed trust moneys.....		1,422.39
Total assets.....		\$278,831.28
Liabilities		
Liability for:		
Amounts withheld from contracts.....	\$212,982.29	
Convict Camp Fund.....	43,480.81	
Prisoners' Trust Fund.....	20,945.79	
Canceled checks.....	1,422.39	
Total liabilities.....		\$278,831.28

^b Includes budget allotments of \$130,518,709 and encumbrances of \$41,671,559 relating to 1950-1951 Fiscal Year state highway budget.

^c Unbudgeted surplus reduced in July and August to \$6,947,511 by votes of Highway Commission augmenting various budget items to conform to revised expenditure program and to finance additional major construction projects.

Footnotes for Statement of Receipts and Disbursements on Page 135

^a Includes Federal Aid of \$15,828,919, Highway Users Tax Revenue of \$129,695,856, and Outdoor Advertising Fees of \$60,000, applying to 1950-1951 Fiscal Year state highway budget. Budget for 1950-1951 Fiscal Year taken into account as of April 1, 1950, in order to permit awarding of construction contracts as authorized by Section 143.1 of the Streets and Highways Code.

^b Includes budget allotments of \$180,518,709 and encumbrances of \$41,671,559 relating to 1950-1951 Fiscal Year state highway budget.

^c Unbudgeted surplus was reduced in July and August to \$6,947,511 by votes of Highway Commission augmenting various budget items to conform to revised expenditure program and to finance additional major construction projects.

DEPARTMENT OF PUBLIC WORKS, DIVISION OF HIGHWAYS

STATEMENT OF RECEIPTS AND DISBURSEMENTS AND
BUDGETARY RESOURCES AND OBLIGATIONS

Excess of income over expenditures as of July 1, 1949.....	\$32,458,062.75	
Suspense items, other assets, reserves.....	5,724,700.87	
Total resources as of July 1, 1949.....		\$38,182,763.62
Receipts during year:		
Highway users tax revenue.....	\$133,629,122.17	
Federal Government reimbursements.....	17,796,475.18	
Contributions.....	6,627,334.03	
Outdoor advertising license fees.....	64,588.27	
Proceeds-sale of Topock Bridge.....	18,739.50	
Recoveries-U. S. war damage claims.....	98,986.66	
Franchise tax-toll ferries.....	600.00	
Total income.....		158,235,845.81
Estimated revenue uncollected as of June 30, 1950:		
Federal aid—		
In process of collection.....	\$1,126,017.79	
Under agreement.....	12,872,027.19	
Work programed and agreements pending.....	21,207,351.86	
Work to be programed.....	2,424,233.70	
Total federal aid.....	\$37,629,630.54	
Highway users tax.....	129,695,856.00	
Outdoor advertising license fees.....	60,000.00	
Work for other state agencies.....	1,156,140.43	
Contributions.....	2,797,534.47	
Total estimated revenue.....		*171,339,161.44
Total budgetary resources.....		\$367,757,770.87
Expenditures during year:		
Regular budgets:		
Highway construction, north.....	\$45,979,364.80	
Highway construction, south.....	45,261,870.38	
Cities $\frac{1}{4}$ c state highways, north.....	1,211,538.94	
Cities $\frac{1}{4}$ c state highways, south.....	1,266,730.81	
Joint highway district, north.....	223,856.80	
Maintenance.....	19,394,892.68	
Cities-city streets.....	16,950,948.09	
Highway planning.....	525,329.68	
Planning survey.....	314,721.57	
Work for other state agencies.....	855,756.81	
Legislative damage claims.....	5,103.77	
Supervision of outdoor advertising.....	62,564.31	
Plants and equipment.....	1,928,177.44	
Administration, State General Fund departments.....	346,335.30	
Administration, Department of Public Works.....	102,651.17	
Administration, Division of Highways.....	3,669,708.00	
Administration, Division of Contracts and Rights of Way.....	166,472.25	
Total regular budget expenditures.....	\$136,266,022.80	
Special budgets:		
Highway construction, north.....	\$513.12	
Highway construction, south.....	830.91	
Highway construction, feeder.....	525,756.49	
County highway construction.....	7,526,427.97	
Total special budget expenditures.....	\$8,053,528.49	
Total expenditures during year.....		\$144,319,551.29
Budgetary resources as of June 30, 1950:		
Excess of income over expenditures.....	\$45,410,077.60	
Suspense items, other assets, reserves.....	6,688,980.54	
Estimated revenue not collected (above).....	*171,339,161.44	\$223,438,219.58
Less: Reserve for Division of Toll Crossings—Chapter 700/49.....		893,049.00
Net budgetary resources.....		\$222,545,170.58
Budgetary allocations:		
Budgetary allotments unencumbered.....	\$108,248,370.05	
Budgetary encumbrances:		
Uncompleted state highway budget contracts.....	\$46,724,671.02	
Uncompleted special budget contracts.....	2,675,929.30	
Operating functions, engineering, and maintenance.....	33,094,515.15	82,495,115.47
Estimated unbudgeted surplus June 30, 1950.....		*\$31,801,685.06

ANALYSIS OF INCOME RECEIVED BY DIVISION OF HIGHWAYS BY FISCAL YEARS TO JUNE 30, 1950

Fiscal year	Total annual revenue ^a	Federal Government reimbursements	Contributions	State General Fund appropriations ^a	1st, 2d, 3d, Highway Funds	Advertising license fees	Miscellaneous	Highway users tax revenue
1911-1912	\$160,503.04			\$6,933.33	\$153,569.71			
1912-1913	1,255,693.94			20,800.00	1,234,893.94			\$4,655.17
1913-1914	2,346,271.78			20,800.00	2,325,471.78			195,115.33
1914-1915	6,719,658.33			20,800.00	6,503,743.60			1,053,883.03
1915-1916	7,566,984.05		\$190,109.68	35,561.60	6,302,191.34			1,094,625.67
1916-1917	2,676,472.92		77,000.00	24,458.08	1,469,285.65			525,282.27
1917-1918	5,797,741.65	\$59,571.76	76,988.27	267,688.68	5,512,231.91			1,741,701.97
1918-1919	7,601,610.33		20,014.48	20,800.00	6,000,000.00			1,924,299.77
1919-1920	8,491,727.26	526,612.01	257,584.66	20,800.00	5,122,000.00			2,434,800.57
1920-1921	9,132,386.08	1,297,200.85	1,925,603.19	128,300.00	19,012,550.00			3,018,192.36
1921-1922	24,140,339.40	2,969,295.33	128,352.00	370,300.00	6,016,200.00			3,785,054.95
1922-1923	13,269,702.28	2,683,093.33	612,738.63	316,600.00	7,000,000.00			7,045,337.74
1923-1924	18,267,769.70	3,371,711.00	496,935.09	1,065.56				9,434,270.58
1924-1925	10,484,482.53	3,371,711.00	3,753,733.09	181,121.75	3,181,500.00			10,934,875.12
1925-1926	14,778,797.79	3,287,067.83	170,663.91	10,000.00				12,171,691.01
1926-1927	15,331,219.89	2,978,864.97	582,702.94	1,079,094.52	b-222,160.50			19,961,155.90
1927-1928	23,814,018.00	2,434,125.74	297,505.18					24,937,044.26
1928-1929	28,078,423.23	3,443,873.79	418,785.58	c-207,926.44				27,150,374.86
1929-1930	31,500,983.35	3,931,822.91	369,022.47	20,000.00				27,845,197.22
1930-1931	32,186,234.92	4,463,802.03	173,425.77					24,767,041.62
1931-1932	34,902,696.49	7,205,767.53	180,484.51					27,213,721.36
1932-1933	33,271,262.63	7,108,490.52	283,995.95					26,656,938.08
1933-1934	37,806,497.26	6,298,332.79	468,194.67			\$22,000.81		27,324,923.48
1934-1935	39,408,389.78	10,041,249.32	486,915.31			24,586.24	\$6,573.55	29,850,381.57
1935-1936	49,483,583.41	9,550,349.23	486,915.31			25,763.17	16,180.45	32,981,567.28
1936-1937	16,571,766.31	16,571,766.31	176,801.77			30,490.80	6,620.39	35,263,082.42
1937-1938	44,952,706.70	8,273,900.08	752,684.00			28,674.33	713.26	35,211,782.98
1938-1939	45,000,745.99	8,269,747.08	407,079.47			32,976.79	—632.95	37,853,584.75
1939-1940	43,338,753.44	7,827,934.90	1,492,202.34			34,343.55		39,066,358.13
1940-1941	48,993,632.66	5,635,924.61	634,832.26			34,343.55	3.23	43,699,183.41
1941-1942	52,909,273.04	15,246,517.40	987,935.21			27,061.44		37,477,183.60
1942-1943	58,417,981.05	10,864,032.80	484,758.31	13,520,000.00		29,955.08		33,597,437.40
1943-1944	39,141,669.64	4,693,307.30	85,298.12			31,234.08	66,866.75	34,267,769.70
1944-1945	64,885,373.90	4,574,012.34	5,207,950.32	12,000,000.00		33,565.74	231,731.77	42,835,763.26
1945-1946	76,693,022.06	10,069,697.28	1,943,481.04			55,367.80	253,083.49	55,381,659.51
1946-1947	107,958,065.50	25,855,041.17	4,400,465.80	c-487.40		62,258.50	1,116,019.25	84,629,690.97
1947-1948	159,245,449.65	22,234,591.88	3,107,568.58	e-12,555.27		64,588.27	543,004.33	133,310,281.50
1948-1949	158,235,945.81	17,796,475.18	6,627,334.03				118,926.16	133,629,122.17
1949-1950								
Totals	\$1,449,029,511.93	\$248,421,324.69	\$23,446,402.27	\$27,865,754.71	\$74,112,243.50	\$607,586.08	*\$2,365,606.88	d\$1,072,210,593.80

a Includes \$275,733.33 paid direct by State Controller to State Highway Engineer and Highway Commissioners.

b Represents discount on bonds.

c Represents reduction of revenue due to reversion of appropriations.

d Does not include appropriation for quarter ending June 30, 1950, received July, 1950—\$22,388,051.07.

e Includes: Net earnings on investments \$1,373,647.04

Recoveries U. S. war damage claims 969,020.34

Franchise tax—oil ferries 4,200.00

Proceeds—sale of Topock Bridge 18,739.50

ANALYSIS OF INCOME RECEIVED BY DIVISION OF HIGHWAYS BY FISCAL YEARS TO JUNE 30, 1950—Continued

Analysis of Highway Users Tax Revenue*		
1947-1948 Fiscal Year		
Motor Vehicle Fuel Taxes:		
Gasoline Tax.....	\$71,681,376.06	
Use Fuel Tax.....	3,026,301.52	
Miscellaneous.....	1,603.11	
Motor Vehicle Transportation Tax.....	4,828,958.30	
Caravan Fees.....	138,952.50	
Motor Vehicle Registration and Weight Fees.....	7,751,399.08	
Total apportionments.....	\$87,426,590.57	
Deduct: Disbursements by State Controller		
To State Controller-Section 2103.1.....	\$100,000.00	
To Counties-Section 2104.....	2,700,000.00	
Net transfer to State Highway Fund.....	\$84,626,590.57	
1948-1949 Fiscal Year		
Motor Vehicle Fuel Taxes:		
Gasoline Tax.....	\$85,576,141.32	
Use Fuel Tax.....	3,734,754.09	
Miscellaneous.....	71,164.97	
Motor Vehicle Transportation Tax.....	6,816,461.97	
Caravan Fees.....	—30.00	
Motor Vehicle Registration and Weight Fees.....	43,303,477.91	
Total apportionments.....	\$139,501,970.26	
1948-49 Fiscal Year—Continued		
Deduct: Disbursements by State Controller		
Contributions to State Retirement System.....	\$1,976.29	
To State Controller-Section 2103.1.....	102,287.00	
To Counties-Section 2104.....	6,087,445.38	
Net transfer to State Highway Fund.....	\$133,310,281.59	
1949-1950 Fiscal Year		
Motor Vehicle Fuel Taxes:		
Gasoline Tax.....	\$90,845,499.74	
Use Fuel Tax.....	4,532,978.33	
Miscellaneous.....	210,598.22	
Motor Vehicle Transportation Tax.....	7,450,896.25	
Motor Vehicle Registration and Weight Fees.....	37,052,430.42	
Total apportionments.....	\$140,092,402.96	
Deduct: Disbursements by State Controller		
Contributions to State Retirement System.....	\$1,208.29	
To State Controller-Section 2103.1.....	—62,403.46	
To Counties-Section 2104.....	6,524,475.96	
Net transfer to State Highway Fund.....	\$133,629,122.17	

* For prior years see Second Annual Report.

FEDERAL REIMBURSEMENTS Analysis of Federal Government Funds Received by Division of Highways by Fiscal Years to June 30, 1950

Fiscal year	Total federal funds	ON STATE SYSTEM							
		Regular federal aid	Urban federal aid	Emergency and public works funds 1930-1935	Federal land projects	Emergency relief-floods 1938-1940	Strategic network	*Public works administration grants (PWA)	Advanced engineering
1917-1918	\$59,571.76	\$59,571.76							
1919-1920	526,612.01	526,612.01							
1920-1921	1,297,200.85	1,297,200.85							
1921-1922	1,925,603.19	1,925,603.19							
1922-1923	2,969,295.33	2,969,295.33							
1923-1924	2,683,093.33	2,683,093.33							
1924-1925	3,371,711.00	3,371,711.00							
1925-1926	3,287,067.83	3,287,067.83							
1926-1927	2,978,864.97	2,978,864.97							
1927-1928	2,434,125.74	2,434,125.74							
1928-1929	3,443,873.79	3,443,873.79							
1929-1930	3,931,822.91	3,931,822.91							
1930-1931	4,493,802.63	4,493,802.63							
1931-1932	7,205,767.53	4,196,940.18		\$3,008,827.35					
1932-1933	7,108,490.62	3,744,429.15		3,364,061.47					
1933-1934	6,298,332.79	654,740.26		5,643,592.53					
1934-1935	10,041,249.32	32,971.95		9,792,386.75	\$215,800.62				
1935-1936	9,550,349.23	633,045.90		7,517,308.18	79,493.05				
1936-1937	16,571,766.51	4,911,042.70		1,294,076.85	204,282.50				
1937-1938	8,873,600.09	5,454,817.96		556,805.34	131,892.00				
1938-1939	9,269,747.08	4,470,223.49		14,264.76	63,097.00	\$867,830.00		\$757,270.00	
1939-1940	6,152,641.50	3,214,413.47		24,252.12	164,324.00	598,791.74		75,718.41	
1940-1941	7,877,824.54	5,512,786.00			179,880.66	316,189.64		178,514.75	
1941-1942	5,635,251.61	3,896,659.66			29,922.66	159,392.86			
1942-1943	15,346,517.40	3,258,650.78			15,154.07	17,285.76	\$246,602.00		
1943-1944	10,864,032.89	1,575,411.24					643,034.58		
1944-1945	4,693,307.39	464,102.88					95,742.64		
1945-1946	4,574,012.34	529,544.49					424,856.00		\$86,366.00
1946-1947	19,069,697.28	8,151,245.04	\$3,754,386.02				884,473.95		107,102.00
1947-1948	25,855,041.17	9,791,511.38	8,148,358.78		38,492.00		3,851.83		36,733.00
1948-1949	22,234,591.48	7,502,294.48	8,976,998.00		31,390.39		26,676.00		26,644.00
1949-1950	17,796,475.18	6,134,122.30	5,090,623.05				88,370.00		142,145.00
Totals	\$243,421,324.69	\$107,531,598.65	\$25,970,365.85	\$31,215,575.35	\$1,153,807.95	\$1,959,490.00	\$2,413,607.00	\$1,011,503.16	\$398,990.00

* Includes PWA grants in the amount of \$104,572.52 accounted as "contributions" in ledger accounts.

FEDERAL REIMBURSEMENTS—Continued

Analysis of Federal Government Funds Received by Division of Highways by Fiscal Years to June 30, 1950

Fiscal year	ON AND OFF STATE SYSTEM					Nonhighway work flight strips
	Works program fund		Federal aid secondary		Access highways	
	Highways	Grade crossings	Highways	Grade crossings		
1917-1918						
1919-1920						
1920-1921						
1921-1922						
1922-1923						
1923-1924						
1924-1925						
1925-1926						
1926-1927						
1927-1928						
1928-1929						
1929-1930						
1930-1931						
1931-1932						
1932-1933						
1933-1934						
1934-1935						
1935-1936						
1936-1937						
1937-1938						
1938-1939						
1939-1940						
1940-1941						
1941-1942						
1942-1943						
1943-1944						
1944-1945						
1945-1946						
1946-1947						
1947-1948						
1948-1949						
1949-1950						
Totals	\$7,747,928.00	\$7,486,362.00	\$18,231,517.11	\$6,985,491.65	\$34,069,762.52	\$2,245,325.45

EXPENDITURES BY DIVISION OF HIGHWAYS TO JUNE 30, 1950

Classified as to Functions

Item	Totals to June 30, 1950		July 1, 1949-June 30, 1950		July 1, 1948-June 30, 1949		July 1, 1947-June 30, 1948	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Preliminary engineering	\$42,962,557.46	3.06	\$6,174,406.87	4.25	\$5,462,960.84	3.30	\$3,563,337.31	2.89
Construction engineering—day labor			147,741.77	.10	150,033.16	.09	102,499.14	.08
Construction engineering—contracts			5,972,273.13	4.11	6,243,052.74	3.77	5,150,730.54	4.14
Construction engineering—total								
Right of way	53,476,534.31	3.81			26,366,758.76	15.95	14,998,513.06	12.05
Construction and improvement work—day labor	126,758,841.80	9.03	20,916,460.07	14.40	4,419,077.23	2.67	3,668,755.15	2.95
Construction and improvements work—contracts	122,636,803.88	8.73	5,277,047.58	3.63	65,564,678.72	39.66	55,071,632.22	44.24
Construction and improvements work—total	577,695,783.77	41.16	58,806,834.25	40.48	112,000.00	.07	73,030.10	.06
Joint Highway Districts	3,765,340.72	.27	223,856.80	.15				
Cities $\frac{1}{2}$ State highways—construction	45,734,527.39	3.26	2,472,821.87	1.70	5,075,459.40	3.08	5,574,013.72	4.48
Totals, construction and improvements	\$973,030,419.33	69.32	\$99,391,442.34	68.82	\$113,394,020.85	68.59	\$88,202,511.24	70.83
Aid to counties	\$25,000.00	.16						
Flight strip construction	2,245,325.45	.11						
County postwar projects	1,499,512.60	.11						
Work for other state agencies	2,339,497.51	.17						
Maintenance	241,293,956.96	17.19	\$55,756.81	.59	\$466,043.84	.28	310,006.55	.25
Cities $\frac{1}{2}$ State highways—maintenance	9,695,523.75	.69	19,394,892.68	13.35	18,301,723.10	11.07	15,617,718.55	12.55
City streets (Section 194-S&H Code)	91,431,123.17	6.52	5,447.88	.02	36,553.58	.02	711,589.15	.57
Damage claims paid	72,483.45		16,950,948.09	11.67	22,518,357.52	13.62	8,102,917.93	6.51
Highway planning			5,103.77		3,414.01		10,722.58	.01
Planning survey	2,945,602.23	.21	525,329.68	.37	483,480.79	.30	431,154.60	.35
Supervision of outdoor advertising	2,885,428.80	.21	314,721.57	.22	386,489.42	.24	366,644.30	.29
Plants and equipment	592,570.52	.04	62,564.31	.04	57,979.41	.04	55,593.72	.04
Reserves and suspense	19,737,335.52	1.40	1,928,177.44	1.33	3,704,539.11	2.24	6,166,393.96	4.96
	6,688,980.54	.48	964,279.67	.66	1,552,452.63	.94	578,006.69	.46
Totals, maintenance, special activities, miscellaneous	\$381,452,340.50	27.18	\$41,007,221.90	28.23	\$47,521,063.41	28.75	\$32,351,276.79	25.99
Administration expense—								
At district offices	\$23,174,675.54	1.65	\$1,844,160.35	1.27	\$1,943,382.98	1.17	\$2,055,065.99	1.65
At headquarters office	19,075,501.96	1.36	1,825,547.65	1.26	1,790,110.88	1.08	1,312,744.43	1.05
Division of Contracts and Rights of Way	889,853.15	.06	166,472.25	.12	148,873.03	.09	125,613.07	.10
Department of Public Works	1,258,241.76	.09	102,651.17	.07	99,041.32	.06	85,987.11	.07
Other State departments	4,454,944.03	.32	346,335.30	.23	415,169.16	.26	346,266.90	.28
Paid direct by State Controller	275,733.33	.02						
Federal—non-highway	7,744.73						17.10	
Total administration	\$49,136,674.50	3.50	\$4,285,186.72	2.95	\$4,396,577.38	2.66	\$3,925,634.60	3.15
Grand totals	\$1,403,619,434.33	100.00	\$145,293,830.96	100.00	\$165,311,661.64	100.00	\$124,479,422.63	100.00

EXPENDITURES BY DIVISION OF HIGHWAYS TO JUNE 30, 1950—Continued

Classified as to Functions

Item	July 1, 1946-June 30, 1947		July 1, 1945-June 30, 1946		March 1, 1912-June 30, 1945	
	Amount	Percent	Amount	Percent	Amount	Percent
Preliminary engineering.....	\$2,854,510.81	3.14	\$2,099,292.94	4.58	\$22,808,108.69	2.74
Construction engineering—day labor.....	101,328.37	.11	66,455.45	.14	—	—
Construction engineering—contracts.....	3,876,767.62	4.27	1,345,613.44	2.94	—	—
Construction engineering—total.....	8,744,008.70	9.63	6,735,981.40	14.70	30,320,039.05	3.64
Right of way.....	3,367,897.17	3.70	2,242,403.53	4.89	48,996,219.81	5.89
Construction and improvement work—day labor.....	42,083,638.48	46.36	11,130,177.57	24.28	103,671,623.22	12.46
Construction and improvement work—contracts.....	150,000.00	.17	—	—	345,038,822.53	41.47
Joint Highway Districts.....	3,920,505.15	4.32	2,343,053.76	5.11	3,206,453.82	.39
Cities $\frac{1}{4}$ State highways—construction.....	—	—	—	—	26,348,673.49	3.17
Totals, construction and improvements.....	\$65,089,556.20	71.70	\$25,962,948.09	56.64	\$580,389,940.61	69.76
Aid to counties.....	—	—	—	—	\$25,000.00	—
Flight strip construction.....	\$1,210.22	.00	\$17,275.49	.04	2,229,324.42	.27
County postwar projects.....	39,354.39	.01	134,438.62	.30	1,325,719.39	.16
Work for other state agencies.....	—	—	—	—	1,077,690.31	.13
Maintenance.....	11,877,566.30	13.09	11,335,460.96	24.72	164,706,983.32	19.80
Cities $\frac{1}{4}$ State highways—maintenance.....	889,304.95	.98	811,681.91	1.77	1,240,493.28	.87
City streets (Section 194-S&H Code).....	6,167,990.39	6.79	3,351,700.04	7.70	34,152,488.00	4.10
Damage claims paid.....	—	—	—	—	1,222,408.86	.15
Highway planning.....	237,089.38	.26	204,173.29	.45	1,093,383.56	.13
Planning survey.....	339,695.04	.37	133,899.33	.29	1,345,050.54	.16
Supervision of outdoor advertising.....	41,677.70	.05	31,108.88	.07	340,648.50	.04
Plants and equipment.....	2,546,797.00	2.81	510,463.68	1.11	4,880,961.33	.59
Reserves and suspense.....	981,476.63	.64	769,213.97	1.68	2,242,950.93	.27
Totals, maintenance, special activities, miscellaneous.....	\$22,719,340.36	25.03	\$17,482,008.73	38.14	\$220,371,429.31	26.49
Administration expense—	—	—	—	—	—	—
At district offices.....	\$1,420,220.33	1.57	\$1,161,086.02	2.53	\$14,750,819.87	1.77
At headquarters office.....	1,062,070.95	1.17	911,862.95	1.99	12,173,165.10	1.47
Division of Contracts and Rights of Way.....	93,896.24	.10	80,334.54	.18	274,644.01	.03
Department of Public Works.....	68,541.91	.07	67,687.82	.15	834,332.43	.10
Other State departments.....	324,244.43	.36	167,864.39	.37	2,855,063.80	.35
Paid direct by State Controller.....	—	—	—	—	275,733.33	.03
Federal—non-highway.....	800.34	—	1,648.75	—	5,778.54	—
Total administration.....	\$2,969,274.25	3.27	\$2,390,484.47	5.22	\$31,169,537.08	3.75
Grand totals.....	\$90,778,170.81	100.00	\$45,835,441.29	100.00	\$831,930,907.00	100.00

EXPENDITURES BY DIVISION OF HIGHWAYS BY FISCAL YEARS TO JUNE 30, 1950

Classified as to Location and Purpose

Fiscal year	Total annual expenditures	EXPENDITURES ON HIGHWAYS					
		Construction—Reconstruction—Improvements (Includes right of way and engineering)			Maintenance		
		On state system			On state system		
		Rural	Incorporated cities ^a	Rural	Incorporated cities	Rural	Incorporated cities ^a
1912-1922	\$68,361,014.24	\$58,325,400.50	---	---	---	\$6,054,750.20	---
1922-1923	18,181,741.42	14,624,956.92	---	---	---	2,077,224.82	---
1923-1924	16,475,994.29	12,094,358.88	---	---	---	2,639,929.64	---
1924-1925	15,815,965.38	11,942,581.96	---	---	---	3,177,066.68	---
1925-1926	16,064,890.01	11,568,911.25	---	---	---	3,426,747.56	---
1926-1927	15,883,286.87	10,353,680.23	---	---	---	5,656,244.73	---
1927-1928	15,883,286.87	10,075,388.80	---	---	---	4,462,993.83	---
1928-1929	23,473,594.47	19,353,930.57	---	---	---	4,926,454.10	---
1929-1930	23,473,594.47	23,182,676.42	---	---	---	6,752,845.51	---
1930-1931	32,454,154.47	23,289,922.75	---	---	---	5,678,964.43	---
1931-1932	32,454,154.47	29,455,989.10	---	---	---	6,843,801.35	---
1932-1933	37,892,832.02	23,723,927.75	---	---	---	5,798,548.59	---
1933-1934	37,892,832.02	23,702,416.28	\$1,638,166.41	---	---	6,932,564.30	\$152,734.25
1934-1935	36,959,679.25	18,704,194.71	8,928,290.86	---	---	7,816,765.34	391,000.05
1935-1936	36,959,679.25	18,704,194.71	8,634,353.94	---	---	8,106,142.64	344,244.63
1936-1937	53,025,100.28	27,707,201.60	8,300,705.08	\$1,263,465.33	\$571,200.81	8,242,696.83	585,831.87
1937-1938	45,518,095.60	20,583,429.04	8,037,406.96	1,101,529.62	1,222,683.57	10,660,911.63	815,667.77
1938-1939	40,884,541.39	18,693,429.11	9,748,329.64	479,047.72	129,799.77	8,251,152.62	796,911.44
1939-1940	44,582,441.20	13,797,241.12	7,445,165.31	981,170.21	382,268.37	9,264,651.07	806,795.17
1940-1941	47,029,003.00	17,813,894.42	8,595,165.31	815,644.01	368,231.99	10,411,642.26	868,571.11
1941-1942	45,621,100.83	17,225,613.06	7,719,063.35	5,851,094.80	2,484,589.97	7,969,320.59	630,487.03
1942-1943	39,620,017.42	14,262,833.06	6,947,063.30	2,875,749.26	2,089,003.95	8,942,213.48	575,702.17
1943-1944	34,184,620.42	13,101,706.83	7,292,843.91	2,858,538.72	1,265,866.11	9,517,678.37	723,291.70
1944-1945	45,835,441.20	15,408,000.51	9,324,760.81	2,955,368.33	2,293,821.52	11,315,872.43	831,270.44
1945-1946	90,778,170.81	36,579,031.21	22,903,661.00	2,855,368.33	2,293,821.52	14,541,158.56	1,825,732.69
1946-1947	124,479,422.63	41,457,090.93	36,142,965.46	7,893,364.24	1,238,955.42	14,600,854.08	2,013,879.51
1947-1948	165,311,661.64	60,553,256.77	44,259,366.15	7,694,090.80	884,757.42	15,724,387.17	3,390,076.06
1948-1949	145,283,830.96	56,865,275.57	37,374,025.86	6,889,645.56	514,516.75	16,010,264.50	---
Totals	\$1,403,619,434.33	\$672,455,838.83	\$238,477,863.83	\$41,432,205.10	\$14,549,033.61	\$233,832,999.22	\$17,150,481.49

DIVISION OF HIGHWAYS

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EXPENDITURES BY DIVISION OF HIGHWAYS BY FISCAL YEARS TO JUNE 30, 1950—Continued

Classified as to Location and Purpose

Fiscal year	EXPENDITURES ON HIGHWAYS		Administration special investigations and highway planning survey	Equipment, plants, reserves, suspense and miscellaneous	Supervision of outdoor advertising	Flight strip construction
	Subventions to counties ^b	Subventions to cities ^c				
1912-1922	-----	-----	\$1,280,038.17	\$2,699,925.37	-----	-----
1922-1923	-----	-----	700,685.05	638,876.73	-----	-----
1923-1924	-----	-----	765,139.85	1,036,565.92	-----	-----
1924-1925	100,701.59	-----	747,845.54	154,600.39	-----	-----
1925-1926	50,000.00	-----	707,189.22	312,111.98	-----	-----
1926-1927	50,000.00	-----	819,675.49	896,313.58	-----	-----
1927-1928	75,000.00	-----	850,542.37	422,231.89	-----	-----
1928-1929	80,000.00	-----	997,208.42	115,911.08	-----	-----
1929-1930	336,280.00	-----	1,066,796.62	204,444.17	-----	-----
1930-1931	411,449.86	-----	1,050,133.14	129,260.96	-----	-----
1931-1932	339,223.20	-----	1,086,879.08	426,256.85	-----	-----
1932-1933	62,560.10	-----	1,100,206.71	207,889.45	-----	-----
1933-1934	663,574.94	-----	1,196,685.82	305,575.75	-----	-----
1934-1935	16,840.85	-----	1,432,696.29	233,108.91	-----	-----
1935-1936	158,722.14	-----	1,308,224.36	983,360.91	-----	-----
1936-1937	100,000.00	-----	1,935,760.95	119,403.55	-----	-----
1937-1938	201,338.64	4,000,269.75	1,865,727.42	758,014.05	-----	-----
1938-1939	25,765.86	4,081,769.62	1,809,589.34	465,054.96	-----	-----
1939-1940	43,000.00	4,225,718.94	1,873,339.46	442,411.28	-----	-----
1940-1941	148,583.00	4,445,932.55	2,225,063.14	396,737.11	-----	-----
1941-1942	127,589.00	4,609,321.49	2,302,842.51	1,259,971.07	-----	-----
1942-1943	142,935.33	3,287,591.87	2,213,377.30	812,284.92	-----	-----
1943-1944	333,302.97	2,790,587.92	2,121,866.02	794,712.59	-----	-----
1944-1945	740,305.93	2,518,438.75	2,020,528.01	52,265.20	-----	-----
1945-1946	134,438.62	3,615,319.61	2,727,478.02	1,280,450.88	-----	-----
1946-1947	189,354.39	6,444,492.83	3,546,057.27	3,128,273.63	-----	-----
1947-1948	73,030.10	8,397,994.99	4,723,433.50	7,065,729.78	-----	-----
1948-1949	112,000.00	22,798,998.23	5,276,547.59	57,979.41	-----	-----
1949-1950	223,856.80	17,075,069.59	5,125,217.97	3,753,317.69	-----	-----
Totals	\$5,289,853.32	\$93,781,260.41	\$54,967,705.53	\$28,838,297.02	\$592,570.52	\$2,245,325.45

^a Includes Cities $\frac{1}{2}$ -cent State Highway Funds.

^b Includes Joint Highway Districts, County Postwar Projects and Aid to Counties.

^c Includes Cities—City Street Funds and Cities $\frac{1}{2}$ -cent State Highway Funds.

NOTE: In this report expenditures incurred in the County of San Francisco, shown on previous reports as rural expenditures, have been reclassified as urban expenditures as the City and County of San Francisco are coterminous.

STATEMENT OF EXPENDITURES IN COUNTIES FOR CONSTRUCTION, RECONSTRUCTION, IMPROVEMENTS, AND MAINTENANCE AND CONTRIBUTIONS RECEIVED IN CONNECTION THEREWITH, JANUARY 1, 1912, TO JUNE 30, 1950

(Expenditures Shown Include Expenditures of Contributions Received From Counties and Others and Expenditures in Joint Highway Districts But Exclude City Gasoline Tax Expenditures)

County	CONSTRUCTION, RECONSTRUCTION, IMPROVEMENTS				MAINTENANCE EXPENDITURES	
	Expenditures		Contributions			
	49-50 fiscal year July 1, 1949 June 30, 1950	Totals January 1, 1912 June 30, 1950	49-50 fiscal year July 1, 1949 June 30, 1950	Totals January 1, 1912 June 30, 1950	49-50 fiscal year July 1, 1949 June 30, 1950	Totals January 1, 1912 June 30, 1950
Alameda	\$8,910,956.17	\$44,302,347.25	\$193,282.48	\$423,749.31	\$566,103.53	\$3,615,483.42
Alpine	84,088.31	851,938.91		2,000.00	70,533.93	1,263,065.05
Amador	174,420.30	3,376,005.98	95,628.73	100,602.19	190,138.91	2,586,448.73
Butte	699,661.51	8,247,316.43	127,446.52	261,339.75	222,423.53	3,227,503.53
Calaveras	127,960.92	3,170,044.66		102,361.10	151,414.06	2,333,253.20
Colusa	43,975.60	3,985,258.58	48,185.60	118,286.67	104,486.61	1,600,241.28
Contra Costa	1,291,517.10	14,270,461.13	4,035.91	82,944.17	357,071.05	3,076,671.87
Del Norte	577,356.90	8,909,643.84	37,755.27	67,599.74	274,974.91	3,930,509.40
El Dorado	336,123.55	4,913,234.91	24,305.27	32,904.97	292,729.71	3,917,867.04
Fresno	1,069,526.64	17,517,452.27	4,500.00	87,095.01	420,629.33	4,129,296.56
Glenn	215,715.58	4,013,794.23	161,658.91	285,230.51	62,352.52	1,338,150.03
Humboldt	1,620,112.91	21,139,466.33	46,737.04	591,092.37	570,252.83	10,078,678.65
Imperial	1,621,443.26	19,226,377.74		124,304.19	244,482.37	4,273,607.68
Inyo	496,030.84	6,079,062.65		4,500.00	221,427.05	3,355,831.05
Kern	1,799,016.93	32,345,242.15	230,001.34	411,891.18	775,094.48	9,487,691.45
Kings	244,538.55	2,960,927.62	2,827.72	34,663.72	98,041.72	1,478,082.27
Lake	277,690.75	4,435,549.70	—91.70	6,805.44	147,165.44	2,522,588.84
Lassen	255,688.65	6,664,778.60	124,175.54	354,855.70	266,480.66	3,218,584.04
Los Angeles	24,050,737.80	159,398,398.92	1,131,498.74	2,933,981.42	2,053,544.66	15,927,699.17
Madera	910,204.50	7,039,306.88	6,000.00	136,276.20	142,402.77	1,353,621.48
Marin	829,138.58	13,469,105.01	—40,707.37	138,819.17	224,722.22	3,194,497.62
Mariposa	75,039.87	5,024,202.45	871.99	125,880.09	87,164.61	1,803,902.73
Mendocino	1,574,801.66	21,636,101.88	98,989.44	218,885.14	531,088.38	8,303,384.83
Merced	1,316,403.04	10,464,774.98	6,382.85	81,866.98	235,358.47	2,842,031.63
Modoc	1,157,094.11	6,046,155.07	101,168.77	249,467.37	222,373.80	2,647,433.26
Monroe	276,726.35	5,708,746.52		199.80	334,100.85	4,774,289.65
Monterey	1,344,345.65	25,877,658.85	214,550.00	362,072.61	376,009.63	5,501,851.65
Napa	667,737.68	4,668,051.29	4,533.27	127,649.93	149,219.70	2,056,167.20
Nevada	146,403.11	6,786,775.49		107,805.82	315,017.21	4,152,216.22
Orange	1,366,303.63	19,778,118.88	8,139.99	278,990.54	418,187.08	4,520,202.19
Placer	2,682,821.19	14,261,424.62	19,996.90	101,005.47	307,252.21	4,244,859.43
Plumas	496,495.92	8,370,658.03		95,155.15	284,790.51	3,600,753.82
Riverside	3,169,985.60	24,046,378.40	46,856.79	806,414.91	560,263.75	7,340,258.24
Sacramento	958,329.23	14,638,427.48	101,226.05	552,645.58	364,255.72	4,606,110.49
San Benito	190,446.94	3,671,476.49		73,909.52	89,412.32	1,243,933.24
San Bernardino	2,776,644.84	35,582,833.28	6,565.27	294,322.09	1,025,262.27	15,239,705.51
San Diego	4,496,147.70	46,876,059.76	258,820.58	1,464,735.46	674,560.51	7,133,408.62
San Francisco	5,781,300.59	25,178,274.02	7,705.35	304,034.15	168,797.56	4,298,685.65
San Joaquin	2,250,254.02	16,410,322.83	2,414.03	92,508.49	286,777.49	4,061,063.29
San Luis Obispo	1,509,890.96	17,631,703.65	14,775.95	97,532.79	430,979.10	5,075,787.21
San Mateo	1,357,132.97	28,427,892.44	454,593.50	3,322,631.79	407,209.08	4,447,451.59
Santa Barbara	2,118,179.32	26,205,072.21	75,627.89	266,808.43	379,634.71	4,955,791.21
Santa Clara	1,866,904.24	19,597,744.77	1,666,710.25	1,935,723.93	355,000.60	4,548,637.84
Santa Cruz	833,537.74	10,940,894.47	72,001.61	675,969.62	211,265.11	3,130,343.78
Shasta	1,726,147.95	22,390,063.52	202,788.98	2,128,504.31	458,282.39	6,325,348.91
Siskiyou	1,394,444.81	1,354,626.73	—6,114.34	20,629.34	146,118.20	1,345,063.21
Sonoma	1,998,714.21	12,865,038.23	551.75	127,271.23	413,974.57	5,566,708.02
Solano	1,998,714.21	19,610,478.31	—40.05	61,226.30	328,578.83	3,964,700.09
Sonoma	1,118,243.75	11,767,238.48	12,221.05	165,993.50	417,722.34	4,960,181.54
Stanislaus	724,938.02	6,764,697.13	7,237.16	29,903.50	121,826.78	1,551,819.07
Sutter	410,200.36	3,576,525.60	32,854.60	83,034.23	65,724.52	729,363.46
Tehama	277,331.01	8,219,568.45	206,662.73	251,881.63	237,277.41	3,754,076.17
Trinity	407,128.10	7,460,495.32		12,680.00	191,895.85	2,815,641.88
Tulare	2,065,854.27	13,046,643.02	273,500.00	433,935.75	346,538.67	4,052,067.36
Tuolumne	234,840.45	2,597,339.51	117.44	13,914.62	236,818.33	3,453,214.92
Ventura	1,515,881.13	19,924,943.75		16,500.00	450,998.22	5,956,727.28
Yolo	1,228,257.65	9,079,887.15	51,601.79	134,266.18	259,515.76	3,122,328.52
Yuba	237,871.82	4,728,082.20	917.56	117,849.51	49,168.35	950,271.75
Totals	\$97,518,620.47	\$927,081,229.05	\$6,141,469.21	\$21,535,108.39	\$19,394,892.68	\$241,293,956.96

STATE HIGHWAY OPERATING BUDGET—1950-1951 FISCAL YEAR
Statement of Budgetary Transactions as of June 30, 1950 **

	From 1949-1950 fiscal year budget	Original budget	Budgetary adjustments	Contributions	Adjusted budget and contributions	Expenditures authorized work orders	Unencumbered balance available
Preliminary engineering:							
North.....	-----	\$2,100,000.00			\$2,100,000.00	\$839,000.00	\$1,261,000.00
South.....	-----	3,600,000.00			3,600,000.00	1,059,000.00	2,541,000.00
Totals.....	-----	\$5,700,000.00			\$5,700,000.00	\$1,898,000.00	\$3,802,000.00
Right of way:							
North.....	-----	\$8,889,200.00			\$8,889,200.00	\$2,298,000.00	\$6,591,200.00
South.....	-----	11,895,000.00			11,895,000.00	975,000.00	10,920,000.00
Contributions—south.....	-----			\$6,490.00	6,490.00		6,490.00
Totals.....	-----	\$20,784,200.00		\$6,490.00	\$20,790,690.00	\$3,273,000.00	\$17,517,690.00
Construction engineering:							
North.....	-----	\$3,000,000.00			\$3,000,000.00	\$1,020,000.00	\$1,980,000.00
South.....	-----	3,300,000.00			3,300,000.00	892,000.00	2,408,000.00
Contributions—south.....	-----			\$150.00	150.00		150.00
Totals.....	-----	\$6,300,000.00		\$150.00	\$6,300,150.00	\$1,912,000.00	\$4,388,150.00
Construction projects:							
North.....	-----	\$26,086,000.00	—\$2,202,243.34		\$23,883,756.66	\$9,718,818.65	\$14,164,938.01
Contributions—north.....	-----			\$1,619,215.10	1,619,215.10	1,367,340.62	\$1,874.48
South.....	-----	30,816,000.00	—7,015,544.33		23,800,455.67	2,014,226.27	21,786,229.40
Contributions—south.....	-----			3,500.00	3,500.00		3,500.00
Totals.....	-----	\$56,902,000.00	—\$9,217,787.67	\$1,622,715.10	\$49,306,927.43	\$13,300,385.54	\$36,006,541.89
Minor improvements and betterments:							
North.....	-----	\$750,000.00	\$180,233.13		\$930,233.13	\$182,704.05	\$747,439.08
Contributions—north.....	-----			\$640.19	640.19	580.10	60.09
South.....	-----	750,000.00	197,468.40		947,468.40	197,468.40	750,000.00
Contributions—south.....	-----			1,455.80	1,455.80	905.80	550.00
Totals.....	-----	\$1,500,000.00	\$377,701.53	\$2,095.99	\$1,879,797.52	\$381,748.44	\$1,498,049.08

STATE HIGHWAY OPERATING BUDGET—1949-1950 FISCAL YEAR

Statement of Budgetary Transactions as of June 30, 1950 *

	From 1948-1949 fiscal year budget	Original budget	Budgetary adjustments	Contributions	Adjusted budget	Expenditures and contract obligations	Unexpended balance
Preliminary engineering:							
North.....		\$2,100,000.00	\$350,444.12		\$2,450,444.12	\$2,450,444.12	
Contributions—north.....				\$33,886.09	33,886.09	33,886.09	
South.....		2,400,000.00	1,085,735.22		3,485,735.22	3,485,735.22	
Contributions—south.....				97,452.93	97,452.93	97,452.93	
Totals.....		\$4,500,000.00	\$1,446,179.34	\$131,339.02	\$6,077,518.36	\$6,077,518.36	
Right of way:							
North.....		\$5,879,500.00	\$3,179,109.38		\$9,058,609.38	\$9,058,609.38	
Contributions—north.....				\$270,000.00	270,000.00	270,000.00	
South.....		11,822,000.00	—920,753.47		10,901,246.53	10,901,246.53	
Contributions—south.....				423,300.33	423,300.33	423,300.33	
Totals.....		\$17,701,500.00	\$2,258,355.91	\$693,300.33	\$20,653,156.24	\$20,653,156.24	
Construction engineering:							
North.....		\$2,600,000.00	\$275,285.99		\$2,875,285.99	\$2,875,285.99	
South.....		2,600,000.00	92,954.14		2,692,954.14	2,692,954.14	
Contributions—south.....				\$42,820.00	42,820.00	42,820.00	
Totals.....		\$5,200,000.00	\$368,240.13	\$42,820.00	\$5,611,060.13	\$5,611,060.13	
Construction projects:							
North.....		\$31,319,000.00	—\$693,398.00		\$30,625,602.00	\$30,598,602.00	b\$27,000.00
Contributions—north.....				\$88,605.63	88,605.63	72,591.03	a16,014.60
South.....		34,684,000.00	322,344.88		35,006,344.88	35,566,344.88	b40,000.00
Contributions—south.....				515,392.85	515,392.85	515,392.85	
Totals.....		\$66,003,000.00	\$228,946.88	\$603,998.48	\$66,835,945.36	\$66,752,930.76	\$83,014.60
Minor improvements and betterments:							
North.....		\$425,000.00	\$243,426.46		\$668,426.46	\$668,426.46	
Contributions—north.....				\$67,389.48	67,389.48	64,372.96	a\$3,016.52
South.....		725,000.00	—124,318.61		600,681.39	600,650.48	b30.91
Contributions—south.....				81,988.25	81,988.25	75,887.10	a6,101.15
Totals.....		\$1,150,000.00	\$119,107.85	\$149,377.73	\$1,418,485.58	\$1,409,337.00	\$9,148.58
Cities ¼ cent—State highways:							
North.....	\$3,367,514.55				\$3,367,514.55	\$1,196,667.06	c\$2,170,847.49
South.....	1,600,988.86				1,600,988.86	1,126,276.58	c474,712.28
Totals.....	\$4,968,503.41				\$4,968,503.41	\$2,322,943.64	\$2,645,559.77

STATE HIGHWAY OPERATING BUDGET—1948-1949 FISCAL YEAR

Statement of Budgetary Transactions as of June 30, 1950 *

	From 1947-1948 fiscal year budget	Original budget 1948-1949 fiscal year	Budgetary adjustments	Contributions	Adjusted budget and contributions	Expenditures and contract obligations	Unexpended balance
Preliminary engineering:							
North		\$2,250,000.00	—\$171,046.75		\$2,078,953.25	\$2,078,953.25	
Contributions—north				\$75,659.39	75,659.39	75,659.39	\$8,156.11
South		1,975,000.00	1,160,324.74	60,000.00	3,135,324.74	3,135,324.74	
Contributions—south					60,000.00	60,000.00	
Totals		\$4,225,000.00	\$989,277.99	\$135,659.39	\$5,349,937.38	\$5,346,781.27	\$3,156.11
Right of way:							
North		\$4,900,000.00	\$5,200,659.85		\$10,100,659.85	\$10,100,659.85	
Contributions—north				\$4,755.49	4,755.49	4,755.49	
South		13,382,000.00	2,360,047.38		15,742,047.38	15,742,047.38	
Contributions—south				354,876.63	354,876.63	354,876.63	
Totals		\$18,282,000.00	\$7,561,307.23	\$359,632.12	\$26,202,939.35	\$26,202,939.35	
Construction engineering:							
North		\$2,000,000.00	\$733,866.33		\$2,733,866.33	\$2,733,866.33	
Contributions—north				\$41,114.47	41,114.47	41,114.47	
South		2,000,000.00	658,104.58		2,658,104.58	2,658,104.58	
Contributions—south				61,283.10	61,283.10	61,283.10	
Totals		\$4,000,000.00	\$1,391,970.91	\$102,397.57	\$5,794,368.48	\$5,794,368.48	
Construction projects:							
North		\$25,954,500.00	—\$296,759.19		\$25,657,740.81	\$25,649,395.68	\$8,345.13
Contributions—north				\$351,061.71	351,061.71	339,287.87	\$11,773.84
South		25,341,500.00	516,229.87		25,857,729.87	25,857,729.87	
Contributions—south				1,438,769.91	1,438,769.91	1,438,769.91	
Totals		\$51,296,000.00	\$219,470.68	\$1,789,831.62	\$55,305,302.30	\$53,285,183.33	\$20,118.97
Minor improvements and betterments:							
North		\$650,000.00	—\$126,195.35		\$523,804.65	\$523,804.65	
Contributions—north				\$34,693.13	34,693.13	34,650.84	\$42.29
South		1,000,000.00	—469,519.85		530,480.15	530,480.15	
Contributions—south				90,563.37	90,563.37	90,563.37	
Totals		\$1,650,000.00	—\$595,715.20	\$125,256.50	\$1,179,541.30	\$1,179,499.01	\$42.29
Cities $\frac{1}{2}$ cent—State highways:							
North		\$4,957,923.43			\$4,957,923.43	\$1,590,408.88	\$3,367,514.55
South		4,983,795.48			4,983,795.48	3,382,806.62	\$1,600,988.86
Totals		\$9,941,718.91			\$9,941,718.91	\$4,968,503.41	\$4,968,503.41

Joint highway districts:	North	South	Totals
Confingency reserves:			
North	\$5,667,379.05	\$2,438,350.00	\$8,105,729.05
South	7,045,727.21	2,981,650.00	10,027,377.21
Totals	\$12,713,106.26	\$5,420,000.00	\$18,133,106.26
Summary:			
North	\$10,625,302.48	\$38,192,850.00	\$48,818,152.48
South	12,032,522.69	46,680,150.00	58,712,672.69
Totals	\$22,657,825.17	\$84,873,000.00	\$107,530,825.17
City streets	\$9,670,189.85	\$18,400,000.00	\$28,070,189.85
General maintenance		7,783,882.00	7,783,882.00
Major slides		1,353,000.00	1,353,000.00
Replacement and improved service		5,213,018.00	5,213,018.00
Maintenance in cities		3,200,000.00	3,200,000.00
Buildings and plants		3,000,000.00	3,000,000.00
Highway planning		850,000.00	850,000.00
Construction and automotive equipment		2,000,000.00	2,000,000.00
Administration		4,000,000.00	4,000,000.00
Work for other state agencies	205,034.64		205,034.64
Supervision of outdoor advertising	8,712.47		8,712.47
Totals	\$32,631,762.13	\$130,728,000.00	\$163,359,762.13
Less contributions held pending determination of ultimate disposition thereof			
Unexpended state funds			
Retained to augment going contracts			
Transferred to 1949-1950 fiscal year budget			

* After giving effect to July and August votes of Highway Commission clearing residual unexpended balances to Contingency Reserves for transfer to 1949-1950 Fiscal Year budget.

* Increase in Highway Users Tax apportionments. \$2,960,311.59

Franchise tax—toll ferries	600.00
TOTAL	600.00

Interest on investments.....	664.47
Federal aid.....	78 403.00

Federal aid	18,403.00
Recoveries—U. S. war damage claims	218,709.86

Service agreements—work for other state agencies	838,306.59

	\$20,100.00

Depreciation on equipment	1,367,718.04
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Depreciation on buildings and plants	200,053.59
Increase outdoor advertising space	7,959.54

INCREASE OUTDOOR ADVERTISING FEES 1,208.64

\$5,672,025.68

STATE HIGHWAY OPERATING BUDGET—1947-1948 FISCAL YEAR

Statement of Budgetary Transactions as of June 30, 1950

	Transfers		Budgetary adjustments	Contributions	Adjusted budget	Expenditures and contract obligations	Unexpended balances
	From 1946-1947 fiscal year operating budget	From 1947-1948 fiscal year budget					
Preliminary engineering:							
North-----	\$187,200.01	\$1,500,000.00	—\$27,226.07	—\$79,472.12	\$1,580,501.82	\$1,580,501.82	-----
South-----	219,966.75	2,000,000.00	—403,280.17	914.33	1,817,600.91	1,817,600.91	-----
Totals-----	\$407,166.76	\$3,500,000.00	—\$430,506.24	—\$78,557.79	\$3,398,102.73	\$3,398,102.73	-----
Right of way:							
North-----	\$1,025,187.74	\$6,000,000.00	—\$516,676.43	—\$112,272.86	\$6,396,238.45	\$6,396,238.45	-----
South-----	1,832,388.96	7,500,000.00	—673,950.75	1,983.04	8,660,421.25	8,660,421.25	-----
Totals-----	\$2,857,576.70	\$13,500,000.00	—\$1,190,627.18	—\$110,289.82	\$15,056,659.70	\$15,056,659.70	-----
Construction engineering:							
North-----	\$471,340.34	\$2,100,000.00	—\$331,526.47	—\$779.74	\$2,239,034.13	\$2,239,034.13	-----
South-----	771,455.70	2,100,000.00	—640,718.01	13,314.72	2,244,052.41	2,244,052.41	-----
Totals-----	\$1,242,796.04	\$4,200,000.00	—\$972,244.48	\$12,534.98	\$4,483,086.54	\$4,483,086.54	-----
Construction projects:							
North-----	\$26,612,215.11	\$16,714,000.00	—\$290,971.10	—\$4,377,219.57	\$38,658,024.44	\$38,657,757.11	—\$267.33
South-----	21,207,588.16	17,546,600.00	1,721,273.17	808,522.84	41,283,984.17	41,283,984.17	-----
Totals-----	\$47,819,803.27	\$34,260,600.00	\$1,430,302.07	—\$3,568,696.73	\$79,942,008.61	\$79,941,741.28	\$267.33
Cities $\frac{1}{2}$ & State highways:							
North-----	\$5,718,086.55	\$1,294,358.94	-----	-----	\$7,012,445.49	\$2,054,522.06	^b \$4,957,923.43
South-----	7,707,483.86	1,902,341.89	-----	-----	9,609,825.75	4,626,030.27	^{b4} \$4,983,795.48
Totals-----	\$13,425,570.41	\$3,196,700.83	-----	-----	\$16,622,271.24	\$6,680,552.33	\$9,941,718.91

Joint highway districts: North	\$189,898.86	\$142,000.00	—\$274,476.86	\$35,608.10	\$73,030.10	
Contingency reserves: North	\$200,079.16	\$3,886,355.69	\$1,480,944.20		\$5,667,379.05	\$5,667,379.05
South	2,151,142.89	4,851,887.45	45,646.87		7,048,727.21	67,048,727.21
Totals	\$2,451,222.05	\$8,738,293.14	\$1,526,591.07		\$12,716,106.26	\$12,716,106.26
Summary: North	\$34,454,007.77	\$31,636,714.63	\$40,067.27	—\$4,534,136.19	\$61,626,653.48	\$10,625,569.81
South	33,890,026.32	35,900,879.34	48,971.11	\$24,734.93	70,684,611.70	12,032,552.69
Totals	\$68,374,034.09	\$67,537,593.97	\$89,038.38	—\$3,709,401.26	\$132,291,265.18	\$22,658,092.50
City streets	\$5,049,002.45	\$12,835,402.48			\$17,884,404.93	\$8,214,215.08
General maintenance	16,274.50	9,427,613.99	—\$1,404,000.00		8,039,888.49	8,039,888.49
Major slides	25,990.75	1,572,013.08	600,000.00		993,003.83	993,003.83
Replacement and improved service	336,411.29	4,922,143.00	573,950.23		5,832,504.52	5,832,504.52
Maintenance in cities	—	86,308.57	1,349,974.97		1,263,666.40	1,263,666.40
Buildings and plants	1,217,117.98	2,475,699.63	—8,963.58		3,683,854.03	3,683,854.03
Highway planning	170,632.11	627,166.79			797,798.90	797,798.90
Construction and automotive equipment	1,798,245.30	1,424,641.58			3,222,886.88	3,222,886.88
County postwar projects	487.40	—487.40			3,936,340.08	3,936,340.08
Administration	34,191.96	3,902,148.12			604,981.60	604,981.60
Work for other state agencies		604,981.60			64,306.19	64,306.19
Supervision of outdoor advertising		64,306.19				55,593.72
Totals	\$77,022,387.83	\$105,306,914.46		—\$3,709,401.26	\$178,619,901.03	\$32,632,029.46

^aRetained to cover nonparticipating charges on a project executed in conjunction with the Federal Housing Administration—Work Order 1W25.

^bTransferred to 1948-1949 fiscal year budget.

Minus figure under Contributions, Construction Projects, due to elimination from budget of balance of \$4,959,399.60 in appropriation for Golden Gate Bridge approaches.

COUNTY HIGHWAY BUDGET
STATEMENT OF BUDGETARY TRANSACTIONS AS OF JUNE 30, 1950
Apportionments to Counties of Federal Aid Secondary Funds
Under Federal Highway Aid Act of 1948

County	State and federal funds			Contributions		
	Apportionment	Work orders	Unencumbered balance	Amount budgeted	Work orders	Unencumbered balance
Alameda.....	\$101,603.00		\$101,603.00	\$173,772.00	\$2,375.00	\$171,397.00
Alpine.....	40,241.00	\$11,646.00	28,595.00	38,426.00	38,426.00	
Amador.....	40,241.00		40,241.00			
Butte.....	132,663.00		132,663.00	113,000.00		113,000.00
Calaveras.....	48,554.00		48,554.00			
Colusa.....	55,108.00		55,108.00	1,170.51	1,170.51	
Contra Costa.....	117,220.00		117,220.00	4,100.00	4,100.00	
Del Norte.....	40,241.00		40,241.00			
El Dorado.....	69,660.00		69,660.00	1,400.00	1,400.00	
Fresno.....	411,981.00	108,000.00	303,981.00	60,000.00	60,000.00	
Glenn.....	65,503.00	27,623.00	37,880.00	33,782.57	32,964.57	818.00
Humboldt.....	149,526.00		149,526.00	2,800.00	2,800.00	
Imperial.....	169,473.00		169,473.00			
Inyo.....	199,468.00		199,468.00			
Kern.....	360,683.00		360,683.00	11,500.00	10,000.00	1,500.00
Kings.....	96,469.00	5,500.00	90,969.00	12,700.00	12,700.00	
Lake.....	53,964.00		53,964.00			
Lassen.....	119,681.00		119,681.00	12,500.00		12,500.00
Los Angeles.....	824,317.00		824,317.00	1,200.00	1,200.00	
Madera.....	97,888.00		97,888.00	6,000.00	6,000.00	
Marin.....	73,280.00		73,280.00			
Mariposa.....	51,062.00		51,062.00			
Mendocino.....	127,694.00	41,988.36	85,705.64	49,111.64	49,111.64	
Merced.....	138,034.00	15,040.01	122,993.99	800.00	800.00	
Modoc.....	102,226.00		102,226.00			
Mono.....	71,876.00	35,908.00	35,968.00			
Monterey.....	162,075.00	51,000.00	111,075.00	71,300.00	300.00	71,000.00
Napa.....	69,928.00	7,000.00	62,928.00	728.07	728.07	
Nevada.....	50,407.00	10,355.00	40,052.00			
Orange.....	154,313.00	5,900.00	148,413.00			
Placer.....	82,832.00	82,762.00	70.00	56,213.18	56,213.18	
Plumas.....	80,008.00		80,008.00			
Riverside.....	295,873.00		295,873.00	2,490.00	2,490.00	
Sacramento.....	179,971.00		179,971.00			
San Benito.....	57,750.00	2,607.00	55,143.00			
San Bernardino.....	539,336.00	85,000.00	454,336.00	6,482.12	6,482.12	
San Diego.....	234,006.00	12,695.77	221,310.23			
San Joaquin.....	188,639.00		188,639.00	750.00	750.00	
San Luis Obispo.....	126,740.00	13,584.00	113,156.00	1,800.00	1,800.00	
San Mateo.....	72,665.00	72,665.00		77,485.00	76,335.00	1,150.00
Santa Barbara.....	108,788.00	54,349.00	54,439.00			
Santa Clara.....	184,869.00		184,869.00	3,140.00	3,140.00	
Santa Cruz.....	65,574.00	5,396.00	60,178.00	1,350.00	1,350.00	
Shasta.....	131,196.00	131,196.00		157,304.00	157,304.00	
Sierra.....	40,241.00		40,241.00			
Siskiyou.....	189,443.00		189,443.00			
Solano.....	79,748.00		79,748.00			
Sonoma.....	187,771.00	31,000.00	156,771.00	12,221.05	2,675.00	9,546.05
Stanislaus.....	162,122.00	5,000.00	157,122.00	5,400.00	5,400.00	
Sutter.....	58,468.00	37,161.03	21,306.97	31,270.00	30,723.66	546.34
Tehama.....	94,260.00	30,000.00	64,260.00	28,211.00	28,211.00	
Trinity.....	84,811.00		84,811.00			
Tulare.....	293,018.00	76,154.00	216,864.00	6,500.00	4,500.00	2,000.00
Tuolumne.....	69,897.00	67,351.00	2,546.00			
Ventura.....	126,637.00		126,637.00			
Yolo.....	71,064.00		71,064.00			
Yuba.....	47,079.00		47,079.00	900.00	900.00	
County apportionments.....	\$8,048,185.00	\$1,026,881.17	\$7,021,303.83	\$985,807.14	\$602,349.75	\$383,457.39

COUNTY HIGHWAY BUDGET

STATEMENT OF BUDGETARY TRANSACTIONS AS OF JUNE 30, 1950

Apportionment to Counties of Federal Aid Secondary Funds Under Federal Aid Act of 1944 and State Funds Under County Highway Aid Act, Chapters 938 and 952, Statutes of 1945

County	State and federal funds			Contributions		
	Apportionment	Work orders	Unencumbered balance	Amount budgeted	Work orders	Unencumbered balance
Alameda	\$321,777.00	\$321,777.00		\$661.16	\$661.16	
Alpine	127,446.00	96,065.29	\$31,380.71	35,276.00	35,276.00	
Amador	127,446.00	127,441.00	45.00	97,462.52	97,462.52	
Butte	420,150.00	413,693.78	6,456.22	439,998.49	439,998.49	
Calaveras	153,782.00	153,433.00	349.00	36,436.55	36,285.75	\$150.80
Colusa	174,538.00	174,538.00		56,032.65	56,032.65	
Contra Costa	371,242.00	354,569.44	16,672.56	131,935.09	124,369.09	7,566.00
Del Norte	127,446.00	127,446.00		40,599.74	40,599.74	
El Dorado	220,629.00	219,941.34	687.66	42,592.00	42,592.00	
Fresno	1,304,780.00	1,233,186.00	71,594.00	5,017.22	5,017.22	
Glenn	207,446.00	207,446.00		157,150.76	156,898.44	252.32
Humboldt	473,566.00	473,200.60	365.40	157,054.12	157,034.24	19.88
Imperial	536,729.00	528,066.23	8,662.77	537.13	537.13	
Inyo	631,729.00	626,000.76	5,728.24	2,000.00	2,000.00	
Kern	1,142,313.00	938,588.26	203,724.74	88,092.01	88,092.01	
Kings	305,535.00	273,383.15	32,151.85	2,182.47	2,182.47	
Lake	170,905.00	164,438.52	6,466.48	1,805.44	1,805.44	
Lassen	379,042.00	357,599.80	21,442.20	102,435.00	100,471.97	1,963.03
Los Angeles	2,610,683.00	2,392,735.67	217,947.33			
Madera	310,021.00	290,431.84	19,589.16	60,133.25	60,133.25	
Marin	232,079.00	232,079.00		1,793.03	1,793.03	
Mariposa	161,722.00	158,091.35	3,630.65	1,424.60	1,424.60	
Mendocino	404,430.00	400,715.64	3,714.36	135,664.58	135,342.71	321.87
Merced	437,164.00	421,450.56	15,713.44	8,582.85	6,474.04	2,108.81
Modoc	323,749.00	323,317.04	431.96	136,731.74	135,057.07	1,674.67
Mono	227,618.00	185,655.97	41,962.03			
Monterey	513,305.00	499,461.36	13,843.64	219,342.09	219,013.86	328.23
Napa	221,482.00	220,004.98	1,477.02	22,388.54	21,725.42	663.12
Nevada	159,645.00	159,645.00		3,200.00	3,200.00	
Orange	488,730.00	488,730.00				
Placer	262,339.00	262,282.38	56.62	9,213.79	9,213.79	
Plumas	253,393.00	251,030.19	2,362.81	236,654.00	236,523.06	130.94
Riverside	937,060.00	796,241.82	140,818.18	122,490.82	122,442.74	48.08
Sacramento	569,976.00	521,984.20	47,991.80	1,931.47	1,931.47	
San Benito	182,901.00	172,516.82	10,384.18	3,000.00	2,530.72	469.28
San Bernardino	1,708,114.00	1,705,982.87	2,131.13	4,659.40	4,659.40	
San Diego	741,124.00	676,964.93	64,159.07	253,500.00	253,496.66	3.34
San Joaquin	597,435.00	568,767.43	28,667.57	5,632.37	5,632.37	
San Luis Obispo	401,382.00	390,895.25	10,486.75	25,419.19	25,345.96	73.23
San Mateo	230,138.00	230,138.00		241,471.96	241,471.96	
Santa Barbara	344,544.00	344,544.00				
Santa Clara	585,507.00	580,392.23	5,114.77	45,930.18	45,456.73	473.45
Santa Cruz	207,674.00	202,792.69	4,881.31	2,951.61	2,951.61	
Shasta	415,501.00	415,501.00		61,915.75	57,598.80	4,316.95
Sierra	127,446.00	127,446.00		2,122.34	2,122.34	
Siskiyou	599,980.00	599,980.00		143,551.58	143,551.58	
Solano	252,563.00	113,457.63	139,105.37	3,525.32	3,525.32	
Sonoma	594,698.00	566,872.04	27,825.96	15,109.00	15,071.41	37.59
Stanislaus	513,457.00	486,426.49	27,030.51	3,663.37	3,663.37	
Sutter	185,165.00	169,024.66	16,140.34	229,311.27	229,311.27	
Tehama	298,520.00	295,874.38	2,645.62	205,627.41	205,627.41	
Trinity	268,597.00	263,517.31	5,079.69	33,680.00	33,680.00	
Tulare	928,002.00	868,838.56	59,163.44	463,457.08	463,054.58	402.50
Tuolumne	221,364.00	208,995.05	12,368.95	1,017.44	1,017.44	
Ventura	401,086.00	255,704.35	145,381.65			
Yolo	225,072.00	225,072.00		84,718.96	84,718.96	
Yuba	149,112.00	149,112.00		155,682.83	155,682.83	
County apportionments	\$25,489,279.00	\$24,013,446.86	\$1,475,832.14	\$4,342,766.17	\$4,321,762.08	\$21,004.09
Grade crossing protection	265,000.00	246,666.81	18,333.19			
Grade crossing projects	184,047.00	164,159.68	19,887.32	13,798.99	13,798.99	
	\$25,938,326.00	\$24,424,273.35	\$1,514,052.65	\$4,356,565.16	\$4,335,561.07	\$21,004.09

ACCESS HIGHWAYS BUDGET

Statement of Budgetary Transactions as of June 30, 1950

	Budget	Expenditures authorized work orders	Unencumbered balance available
Construction of highways			
North.....	\$6,730,771.23	\$6,722,999.92	\$7,771.31
Contributions—north.....	292.81	292.81	
South.....	7,069,073.74	7,068,886.80	186.94
Off State system—north.....	7,753,426.87	7,753,927.58	—500.71
Contributions—off State system—north.....	23,749.46	23,749.46	
Off State system—south.....	13,642,140.95	13,223,393.48	418,747.47
Contributions—off State system—south.....	307,861.88	307,861.88	
Totals.....	\$35,527,316.94	\$35,101,111.93	\$426,205.01

GRADE SEPARATIONS OPERATING BUDGET

Statement of Budgetary Transactions as of June 30, 1950

	Transfers from 97-98 F.Y.	Budgetary adjustments and contributions	Adjusted budget	Expenditures authorized work orders	Unencumbered balance available
Construction					
North.....	\$1,299,000.00	—\$375,200.00	\$923,800.00	\$921,250.52	\$2,549.48
South.....		4,350.00	4,350.00	4,350.00	
Off State system.....	335,107.24	361,750.13	696,857.37	689,213.67	7,643.70
Off State system—con- tribution.....		150,000.00	150,000.00	150,000.00	
Grade crossing protection.....	120,000.00		120,000.00	111,618.89	8,381.11
Contingency reserve.....	21,900.79	9,099.87	31,000.66		31,000.66
Totals.....	\$1,776,008.03	\$150,000.00	\$1,926,008.03	\$1,876,433.08	\$49,574.95

APPENDIX B
APPORTIONMENT OF MOTOR VEHICLE FEES
AND FUEL TAXES

- (a) Yearly Registration of Motor Vehicles in California
 - (b) County Apportionment of Funds Derived From Motor Vehicle Fees and Fuel Taxes, January 1, 1914, to June 30, 1950
 - (c) Apportionment of Funds Derived From Motor Vehicle Fees and Fuel Taxes, October 1, 1923, to June 30, 1950
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STATEMENT OF REGISTRATION OF MOTOR VEHICLES IN THE STATE OF CALIFORNIA FROM RECORDS OF THE DEPARTMENT OF MOTOR VEHICLES

	Fee paid registrations				Exempt registrations	Total registrations	Yearly increase	Percent increase over previous year
	Autos	Trucks	Trailers	Motor-cycles				
3/22/05- 6/30/06-----	6,428					6,428		
7/ 1/06- 6/30/08-----	17,015					17,015	10,587	164.70
7/ 1/08- 6/30/10-----	36,146					36,146	19,131	112.44
7/ 1/10- 6/30/12-----	76,669					76,669	40,523	112.11
7/ 1/12-12/31/13-----	122,444					122,444	45,775	59.70
1914-----	123,516			24,709		148,225	25,781	21.06
1915-----	164,795			26,401		191,196	42,971	28.39
1916-----	232,440			30,994		263,434	72,238	37.78
1917-----	306,916			30,417		337,333	73,899	28.05
1918-----	364,800		674	25,973		391,447	54,114	16.04
1919-----	477,450		1,658	26,072		505,180	113,733	29.06
1920-----	532,934	41,689	2,644	20,564	9,000	604,187	99,007	19.60
1921-----	645,522	35,092	3,421	17,729	11,721	713,485	109,298	18.09
1922-----	822,394	39,413	4,861	16,301	14,163	897,132	183,647	25.74
1923-----	1,056,756	43,527	5,808	14,694	16,660	1,137,445	240,313	26.79
1924-----	1,125,201	193,871	19,033	12,324	17,776	1,368,205	230,760	20.29
1925-----	1,224,831	214,571	25,453	10,997	22,280	1,498,132	129,927	9.50
1926-----	1,383,097	216,149	30,759	10,289	24,027	1,664,321	166,189	11.09
1927-----	1,479,411	213,784	34,126	9,444	26,108	1,762,873	98,552	5.92
1928-----	1,582,477	217,413	37,073	9,449	30,520	1,876,932	114,059	6.47
1929-----	1,885,308	89,033	42,899	9,628	35,275	2,062,143	185,211	9.87
1930-----	1,941,969	99,387	48,532	9,405	37,337	2,136,630	74,487	3.61
1931-----	1,938,068	105,213	55,024	8,970	38,199	2,145,474	8,844	0.41
1932-----	1,865,333	106,283	61,870	8,338	38,433	2,080,257	-65,217	-3.04
1933-----	1,850,608	108,189	69,987	8,134	38,507	2,075,425	-4,832	-0.23
1934-----	1,876,192	116,924	79,474	8,294	39,569	2,120,453	45,028	2.17
1935-----	2,015,018	135,722	95,227	8,861	25,657	2,280,485	160,032	7.55
1936-----	2,178,038	148,991	112,080	9,816	28,638	2,477,563	197,078	8.64
1937-----	2,319,341	164,132	132,927	11,240	29,593	2,657,233	179,670	7.25
1938-----	2,339,208	170,483	142,257	11,785	30,732	2,694,465	157,366	5.92
1939-----	2,422,322	182,825	155,304	13,247	33,875	2,807,573	113,108	4.20
1940-----	2,573,264	198,895	167,917	15,876	34,310	2,990,262	182,689	6.51
1941-----	2,740,101	221,146	184,096	18,051	35,305	3,198,699	208,437	6.97
1942-----	2,617,853	216,955	187,431	19,913	38,292	3,080,444	-118,255	-3.70
1943-----	2,533,436	215,465	176,257	19,414	41,224	2,985,796	-94,648	-3.07
1944-----	2,553,362	225,881	191,672	22,309	43,406	3,036,630	50,834	1.70
1945-----	2,604,789	248,388	238,490	27,173	44,536	3,163,376	126,746	4.17
1946-----	2,801,076	296,806	307,816	36,353	47,773	3,489,824	326,448	10.32
1947-----	3,113,329	363,225	349,743	53,234	54,564	3,934,095	444,271	12.73
1948-----	3,350,078	403,702	361,230	60,857	57,722	4,233,589	299,494	7.61
1949-----	3,671,466	429,725	355,575	57,475	65,254	4,579,495	345,906	8.17
1950 to June 30-----	3,697,399	427,183	321,524	47,466	67,983	4,561,555		

NOTE: Prior to 1920 auto and truck registration was not segregated.

— Indicates decrease.

COUNTY APPORTIONMENTS OF FUNDS DERIVED FROM MOTOR VEHICLE FEES AND FUEL TAXES

County	County apportionment of motor vehicle fees Jan. 1, 1914 to Dec. 31, 1917	County apportionment of motor vehicle fuel tax, Oct. 1, 1923 to June 30, 1947	Subtotal of apportionments prior to operation of the Collier-Burns Act	County apportionment of funds pursuant to Collier-Burns Highway Act of 1947			Total apportionment Jan. 1, 1914 to June 30, 1949
				July 1, 1947 to Dec. 31, 1947	1948	1949	
Alameda.....	\$7,889,019.48	*\$21,003,804.11	\$28,892,823.59	\$543,026.07	\$2,045,584.36	\$2,252,228.77	\$34,801,544.74
Alpine.....	4,813.47	496,172.18	500,985.65	15,673.23	56,108.01	59,780.20	664,811.32
Amador.....	141,383.11	785,858.73	927,241.84	140,594.64	146,789.67	159,162.51	1,334,843.89
Butte.....	855,623.82	2,500,072.44	3,355,696.26	149,267.75	504,582.79	526,106.39	4,793,166.63
Calaveras.....	137,787.20	783,901.09	921,688.29	68,974.91	225,887.92	231,303.33	1,560,331.86
Colusa.....	268,037.71	999,340.32	1,267,378.03	80,394.62	257,775.36	266,026.52	2,003,168.73
Contra Costa.....	\$1,682,284.96	*5,032,328.32	6,714,613.28	192,816.54	747,148.29	845,998.33	8,911,313.79
Del Norte.....	84,990.28	*668,818.46	753,808.74	21,751.68	81,730.29	87,303.08	987,143.83
El Dorado.....	191,583.41	924,170.57	1,115,753.98	79,916.51	273,932.02	286,563.19	1,895,874.33
Fresno.....	3,702,179.76	8,957,095.06	12,659,274.82	415,273.64	1,414,642.18	1,509,793.36	16,742,124.30
Glenn.....	307,550.17	*1,106,746.94	1,414,297.11	95,133.02	304,144.29	317,224.76	2,286,450.38
Humboldt.....	819,005.20	2,434,113.52	3,253,118.72	120,360.39	412,469.16	433,313.18	2,128,514.30
Imperial.....	1,126,820.51	*3,133,885.95	4,260,706.46	210,243.91	673,664.76	749,309.46	3,738,943.94
Inyo.....	165,264.51	808,837.49	974,102.00	110,341.41	342,302.99	352,099.36	1,951,859.92
Kern.....	\$2,339,878.22	*6,262,247.79	8,602,126.01	319,234.05	1,114,288.52	1,166,424.56	11,772,253.68
Kings.....	662,120.57	1,999,351.32	2,661,471.89	122,562.36	408,587.81	423,082.73	3,822,257.27
Lake.....	175,418.34	869,516.00	1,044,934.34	58,231.46	196,688.22	204,808.41	1,605,393.61
Lassen.....	229,743.89	995,979.92	1,228,723.81	124,468.96	387,290.07	406,543.91	199,600.03
Los Angeles.....	\$44,785,740.06	*120,357,784.91	165,343,524.97	3,444,929.89	13,065,564.38	13,855,947.05	6,672,699.90
Madera.....	394,016.66	1,417,226.81	1,811,243.47	138,647.21	442,900.05	460,202.75	2,271,581.98
Marin.....	677,187.51	2,234,401.47	2,911,588.98	68,328.36	264,249.29	289,027.66	3,676,207.72
Mariposa.....	75,548.75	661,127.43	736,676.18	54,257.89	177,458.27	189,348.04	2,251,217.90
Mendocino.....	432,033.04	1,477,474.99	1,909,508.03	109,552.97	358,894.13	378,785.91	2,433,347.29
Merced.....	807,093.21	2,507,317.66	3,314,410.87	199,907.15	646,966.18	688,570.23	5,189,802.51
Modoc.....	138,563.51	767,911.66	906,476.17	78,194.81	255,539.38	264,872.54	1,636,753.04
Mono.....	25,915.20	546,887.71	572,802.91	59,897.16	191,038.20	211,521.34	1,142,147.65
Monterey.....	\$1,130,162.04	*3,605,491.55	4,695,653.59	190,729.66	535,422.86	573,108.68	6,981,381.08
Napa.....	505,579.57	1,672,802.94	2,181,382.51	156,310.93	503,580.91	529,196.41	2,763,626.78
Nevada.....	228,412.79	1,031,126.96	1,265,539.75	73,037.79	246,168.87	252,562.88	1,776,980.44
Orange.....	2,734,226.35	*7,246,577.81	9,979,773.51	205,712.46	784,894.24	856,128.89	12,215,246.23

Placer.....	510,353.73	1,701,558.77	2,211,912.50	85,413.99	296,098.16	308,223.70	151,307.19	3,052,955.54
Plumas.....	143,945.55	807,993.59	951,639.14	64,929.04	212,730.37	220,884.98	107,601.49	1,557,775.02
Riverside.....	1,788,157.86	5,075,637.35	6,863,765.25	336,686.13	1,032,081.74	1,041,891.51	512,761.29	9,787,245.92
Sacramento.....	2,798,154.25	7,905,219.45	10,703,374.20	247,064.62	921,666.65	998,179.06	482,231.63	13,352,516.16
San Benito.....	253,474.18	1,011,193.60	1,264,667.78	46,974.23	162,449.34	168,637.21	82,734.20	1,725,462.76
San Bernardino.....	2,680,208.84	*7,427,714.09	10,077,922.93	390,264.00	1,387,499.94	1,476,129.12	729,355.02	14,091,171.01
San Diego.....	4,594,376.16	*12,384,074.34	18,104,072.34	405,596.28	1,554,203.90	1,710,545.03	818,480.87	21,872,900.42
San Francisco.....	3,496,430.50	*20,838,038.77	29,334,469.27	505,984.44	1,931,881.20	2,046,071.77	977,736.94	34,796,143.62
San Joaquin.....	2,396,974.84	6,301,931.53	8,095,906.37	206,141.95	732,353.86	793,388.00	374,523.35	10,805,313.53
San Luis Obispo.....	687,380.04	*2,135,785.38	2,823,165.42	137,853.55	464,090.25	484,358.83	237,705.51	4,147,173.56
San Mateo.....	1,524,891.92	*4,716,024.61	6,240,916.53	158,721.87	633,239.38	729,433.40	361,446.92	8,123,758.10
Santa Barbara.....	†1,377,382.61	*3,852,231.22	5,229,613.83	107,329.53	402,030.12	419,119.10	206,789.83	6,364,882.41
Santa Clara.....	3,220,645.21	8,568,925.90	11,789,571.11	240,234.51	933,160.72	1,042,104.10	500,839.18	14,505,909.62
Santa Cruz.....	848,701.56	2,598,065.57	3,446,767.13	80,373.26	299,502.39	325,151.55	154,828.76	4,306,023.09
Shasta.....	398,125.70	*1,436,902.91	1,835,028.61	123,271.93	407,259.91	425,568.14	209,357.80	3,000,486.39
Sierra.....	44,164.23	581,674.89	625,839.12	30,484.97	104,295.10	106,839.61	52,308.56	919,765.36
Siskiyou.....	466,805.43	*1,595,009.49	2,061,814.92	156,222.29	491,982.05	544,496.77	265,192.28	3,519,708.31
Solano.....	913,226.39	*2,765,443.73	3,678,670.12	99,239.38	351,183.16	380,948.40	180,791.74	4,690,832.80
Sonoma.....	1,495,669.66	*4,069,015.23	5,564,684.89	155,568.71	557,306.20	588,684.14	288,982.51	7,155,226.45
Stanislaus.....	1,574,418.86	4,232,823.42	5,807,242.28	206,103.65	731,510.44	764,713.33	374,393.35	7,883,963.05
Sutter.....	351,821.48	1,292,193.00	1,644,014.48	94,575.38	309,792.55	321,116.65	156,969.79	2,526,468.85
Tehama.....	313,208.39	*1,160,589.83	1,473,798.22	106,542.09	338,573.60	349,903.45	171,170.29	2,440,077.65
Trinity.....	45,458.77	*597,521.43	642,980.20	72,631.86	228,166.33	237,618.18	116,585.60	1,297,980.17
Tulare.....	1,486,965.44	5,103,374.58	7,040,340.02	344,595.80	1,134,536.65	1,175,450.29	578,812.11	10,273,734.87
Tuolumne.....	185,339.59	*879,347.75	1,064,687.34	55,607.10	185,178.85	189,452.44	92,464.45	1,557,390.18
Ventura.....	1,135,886.23	*3,372,308.22	4,508,164.45	105,980.42	399,539.55	415,452.22	207,473.66	5,636,030.30
Yolo.....	577,839.93	1,802,873.82	2,380,713.75	101,090.55	332,925.17	344,768.37	169,622.93	3,329,127.93
Yuba.....	323,925.88	*1,199,991.69	1,525,917.57	58,943.97	204,709.77	214,727.65	106,833.64	2,108,132.60
Totals.....	†\$1,801,938.53	*\$319,227,108.30	\$433,029,046.83	\$12,110,311.93	\$43,440,039.15	\$46,245,205.49	\$22,461,120.04	\$557,285,723.44

† Deduct the following amounts for reimbursement of the Department of Motor Vehicles for salaries paid highway crossing guards:

1945-1946 Contra Costa \$1,574.84, Kern \$5,233.80, Los Angeles \$111,750.68, Santa Barbara \$2,069.70.

1947 Alameda \$1,618, Contra Costa \$1,265.50, Kern \$1,604, Los Angeles \$35,735, Santa Barbara \$1,959.

* Includes repayment of unemployment relief loans to county as provided in Section 23 of Chapter 207, Statutes of 1933 (for tabulation see First Annual Report).

APPORTIONMENT OF FUNDS DERIVED FROM MOTOR VEHICLE FEES AND FUEL TAXES ±

	To counties	To State Highway Maintenance Fund	To State Highway Construction Fund	To State Highway Fund				Total	Total registration	Average per vehicle	
				To Division of Highways	¼ cent to cities for state highways	¼ cent to cities for major streets	To city streets				
Oct. 1, 1923-Dec. 31, 1923	\$1,389,257.80	\$1,389,257.80						\$2,778,515.60	1,388,905	\$9.04	
Jan. 1, 1924-Dec. 31, 1924	6,182,518.97	6,182,518.96						12,368,033.83	1,498,132	9.60	
Jan. 1, 1925-Dec. 31, 1925	7,194,051.54	7,194,051.54						14,388,103.37	1,558,729	9.38	
Jan. 1, 1926-Dec. 31, 1926	8,260,360.86	8,260,360.86						16,528,729.72	1,662,273	9.38	
Jan. 1, 1927-Dec. 31, 1927	9,349,534.81	9,349,534.81	\$3,788,334.00					20,337,403.63	1,769,392	12.76	
Jan. 1, 1928-Dec. 31, 1928	10,438,491.90	10,438,491.90	9,637,204.90					26,316,188.77	1,876,982	13.02	
Jan. 1, 1929-Dec. 31, 1929	11,527,524.47	11,527,524.47	11,155,181.54					26,316,188.77	1,876,982	13.02	
Jan. 1, 1930-Dec. 31, 1930	12,616,571.52	12,616,571.52	11,858,452.77					26,316,188.77	1,876,982	13.02	
Jan. 1, 1931-Dec. 31, 1931	13,705,627.76	13,705,627.76	11,858,452.77					26,316,188.77	1,876,982	13.02	
Jan. 1, 1932-Dec. 31, 1932	14,794,683.92	14,794,683.92	10,451,671.53					26,316,188.77	1,876,982	13.02	
Jan. 1, 1933-Dec. 31, 1933	15,883,739.36	15,883,739.36	12,079,972.95					26,316,188.77	1,876,982	13.02	
Jan. 1, 1934-Dec. 31, 1934	16,972,795.80	16,972,795.80	5,519,290.66	\$10,827,263.41	\$1,546,751.91			35,118,894.98	2,075,425	16.92	
Jan. 1, 1935-Dec. 31, 1935	18,061,852.24	18,061,852.24		21,171,222.82	3,024,460.41			35,118,894.98	2,075,425	16.92	
Jan. 1, 1936-Dec. 31, 1936	19,150,908.68	19,150,908.68		21,420,000.91	3,319,901.49	\$1,819,242.94		36,293,594.80	2,120,453	17.12	
Jan. 1, 1937-Dec. 31, 1937	20,239,965.12	20,239,965.12		21,434,808.98	3,572,457.05	3,572,457.05		39,536,218.01	2,250,485	17.47	
Jan. 1, 1938-Dec. 31, 1938	21,329,021.56	21,329,021.56		23,178,837.35	3,863,139.56	3,863,139.56		42,869,584.69	2,476,563	17.31	
Jan. 1, 1939-Dec. 31, 1939	22,418,078.00	22,418,078.00		23,320,782.20	3,886,793.70	3,886,793.70		46,641,524.40	2,657,233	17.31	
Jan. 1, 1940-Dec. 31, 1940	23,507,134.44	23,507,134.44		24,608,405.25	4,101,400.88	4,101,400.88		46,641,524.40	2,657,233	17.31	
Jan. 1, 1941-Dec. 31, 1941	24,596,190.88	24,596,190.88		25,586,081.66	4,264,346.94	4,264,346.94		49,216,810.52	2,807,573	17.53	
Jan. 1, 1942-Dec. 31, 1942	25,685,247.32	25,685,247.32		28,484,036.88	4,747,339.49	4,747,339.49		51,172,163.30	2,900,262	17.81	
Jan. 1, 1943-Dec. 31, 1943	26,774,303.76	26,774,303.76		28,484,036.88	4,747,339.49	4,747,339.49		56,968,073.78	3,198,690	17.81	
Jan. 1, 1944-Dec. 31, 1944	27,863,360.20	27,863,360.20		28,266,843.62	4,377,807.27	4,377,807.27		52,533,687.23	3,080,444	17.81	
Jan. 1, 1945-Dec. 31, 1945	28,952,416.64	28,952,416.64		20,781,947.23	3,463,657.86	3,463,657.86		52,533,687.23	2,995,766	13.92	
Jan. 1, 1946-Dec. 31, 1946	29,041,473.08	29,041,473.08		20,925,604.36	3,487,600.73	3,487,600.73		41,851,208.73	3,036,630	13.78	
Jan. 1, 1947-Dec. 31, 1947	30,130,529.52	30,130,529.52		24,802,247.59	4,133,707.89	4,133,707.89		41,851,208.73	3,163,376	15.68	
Jan. 1, 1948-Dec. 31, 1948	31,219,585.96	31,219,585.96		24,283,223.41	5,705,539.71	5,705,539.71		68,466,476.50	3,489,824	19.62	
Jan. 1, 1949-Dec. 31, 1949	32,308,642.40	32,308,642.40		28,685,223.41	7,139,073.81	7,139,073.81		68,466,476.50	3,489,824	19.62	
Jan. 1, 1950-June 30, 1950	33,397,698.84	33,397,698.84		70,431,664.33				168,578,285.26	4,233,589	30.93	
Totals	\$150,404,074.16	\$93,444,128.23	\$64,489,383.43	\$600,179,974.58	\$18,176,443.79	\$57,564,461.67	\$43,824,050.05	\$1,377,032,515.92			
†Includes \$2,500.00 appropriated for the Code Commission by Chapter 698, Statutes 1935.											
										4-year average of 2 cents tax	\$10.33
										19-year average of 3 cents tax	16.67
										3-year average of 4½ cents tax	27.38

2-cent tax per gallon from October 1, 1923, to July 28, 1927. Apportioned 1 cent to counties, 1 cent to State Highway Maintenance Fund.

3-cent tax per gallon from July 29, 1927, to June 30, 1933. Apportioned 1 cent to counties, 1 cent to State Highway Maintenance Fund, 1 cent to State Highway Fund, 1 cent to cities for state highways.

3-cent tax per gallon from July 1, 1935, to June 30, 1947. Apportioned 1 cent to counties, $1\frac{1}{2}$ cents to Division of Highways, $\frac{1}{4}$ cent to cities for state highways, $\frac{1}{4}$ cent to cities for streets or importance.

4½-cent tax per gallon from July 1, 1947. Fuel tax apportioned 13 cents to counties, 2½ cents to Division of Highways, 8 cent to city streets.

* Apportionments for the last half of 1947 were made to effect the transition from former acts to operation under the Collier-Burns Act.

* Apportionments beginning with January 1, 1948, were made according to the Collier-Burris Highway Act of 1947.

$\frac{1}{2}$ cup of vegetable oil or 1 egg; 1 Tbsp. water

APPENDIX C

CONTRACT STATISTICS

(a) Completed Contracts—July 1, 1946, to June 30, 1950.

(b) Incomplete Contracts—June 30, 1950.

NOTE—For contracts completed prior to July 1, 1946, see Fifteenth Biennial Report.

NOTE—* opposite a contract indicates final cost figures not yet available.

COMPLETED CONTRACTS—June 30, 1950

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
4T48	Alameda	5	A	Near Greenville	---	11/21/46	Day Labor	Truck Scale	\$12,000	---	\$12,000
4TC35	Alameda	5	B	San Miguel Ave.-Parkway	0.4	5/16/47	McGuire & Hester	Storm Drain	22,650	\$1,697	24,347
4TC49	Alameda	5	B	At Redwood Road	0.3	4/22/48	J. R. Armstrong	Signals & Channelization	37,640	6,821	44,461
1-4TTC10	Alameda	5	D	Foothill Blvd. at 150th Ave.	---	10/11/49	L. H. Leonardi Electric Const. Co.	Electric	---	1,600	*14,597
1-4TC77	Alameda	5	D, B	Castro Valley Jct. to San Leandro	3.3	4/ 1/49	Lee J. Himmel	Surfacing	12,997	30,000	*276,406
4T124	Alameda	5	Envv Oak	San Pablo Ave. Overpass	0.4	11/18/49	Day Labor	P.M.S. Blanket	10,543	---	10,543
0-4TC72	Alameda	5	F	1.5 Mi. E. to 1.7 Mi. W. of Livermore	3.2	10/19/48	Dan Caputo & Ed Keeble	Grade & Structures	496,807	65,000	*561,807
4T114	Alameda	5	Hay	"A" St. to "B" St.	---	2/ 3/49	Day Labor	Grade & Surface	10,851	1,502	12,353
4T123	Alameda	5	Hay	"B" St. to "C" St.	---	11/16/49	Day Labor	Improving Shoulders	5,488	986	*6,474
4TC41	Alameda	5	Oak	Toll Plaza to Distribution Structure	0.9	6/18/47	Chas. L. Harney, Inc.	Additional Traffic Lanes	144,856	11,609	156,465
4TC43-P	Alameda	5	Oak	Bay Bridge Toll Plaza	0.6	9/ 8/47	San Francisco Br. Co.	Sand Fill	384,718	17,562	402,280
4TC44-P	Alameda	5	Oak	Bay Bridge Toll Plaza	0.6	9/12/47	Piombo Const. Co.	Slope Protection	129,890	13,734	143,624
15T3	Ala.-S.F.	5, 68	Oak-S.F.	See San Francisco County	---	---	---	---	---	---	---
15T5	Ala.-S.F.	5, 68	Oak-S.F.	See San Francisco County	---	---	---	---	---	---	---
0-14TC52	Alameda	5	Oak	Toll Plaza	---	7/22/48	Stolte Inc. & Duncanson Harrelson Co.	Toll Facilities	166,277	10,811	*177,088
0-4TC67	Alameda	5	Oak	San Francisco-Oakland Bay Bridge Toll Plaza	---	8/25/48	Lee J. Himmel	Grade, P.M.S., & Light System	195,663	21,200	*216,863
1-4TTC12	Alameda	5	Oak	Inters. MacArthur Blvd., Foothill Blvd., & 73d Ave.	0.7	1/17/50	L. H. Leonardi Electric Const. Co.	Signals & Lighting	13,356	2,650	*16,006
4TC25	Alameda	5, 69	B, C, B	Bet. Dublin & Mission San Jose & Bet. Alvarado & San Leandro	7.6	6/ 7/46	A. S. Jones	Repair with C.R.B. & P.M.S.	161,255	16,747	178,002
4WC22	Alameda	5, 69	C, A	Bet. Warm Springs & Mission San Jose & Bet. Warm Springs & Centerville	8.3	3/11/46	A. S. Jones	Repair Shoulders	40,118	8,925	49,043
14TMC2	Alameda	5, 69	Oak	At Distribution Structure	---	8/11/48	Pacific Br. Painting Co.	Waterproof & Paint Bridge	43,557	---	43,557
4WC29-P	Ala., C.C.	5, 107	B, A	Hayward to Dublin & Danville to 3.1 Mi. south	5.3	6/ 7/47	J. R. Armstrong	Plant-Mixed Surfacing	151,774	14,611	166,385
4T42	Alameda	14, 5	Envv	In Emeryville	---	9/20/46	Day Labor	Signals	14,676	591	15,267

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
0-4TC68	Alameda	69	A, B, Sln	Centerville to San Leandro	6.7	8/ 3/48	Granite Const. Co.	Base and Surface	\$180,503	\$25,000	*\$205,503
4WC7	Alameda	69	B	In San Lorenzo Village	6.7	10/29/46	Day Labor	Traffic Signals	5,974	371	6,345
1-4TC76	Alameda	69	B	Alvarado to San Leandro	5.4	4/ 1/49	Clements & Co.	Resurf. & Shldr.	158,256	25,000	*183,256
4TC23	Ala.-C.C.	69, 14	Alb, Reh, ECr, A, Pm, Her, B	Bet. El Cerrito Hill Overhead in Albany & Carquinez Bridge	10.5	5/23/46	J. R. Armstrong Const. Co.	Repair with C.R.B., P.M.S. & Pere. Tr. & Construct Devel- erating Lane	58,410	6,832	65,242
0-4TC90-P	Alameda	69	Alb	Cerrito Creek	---	7/ 7/49	J. R. Armstrong	Culvert & Detours	39,812	6,725	*46,537
4WC31-F	Alameda	69	Oak	1 Mi. N. of S.C.L. of Oakland to 0.3 Mi. S. of High St.	2.3	6/25/47	Johnson-Western Co. & Amet. Pipe & Const. Co.	Grade	861,826	60,100	921,926
14WC8	Alameda	69	Oak	5th Ave. Overhead	---	6/21/46	Duncan-Harrelson Co. & Stolte, Inc.	Overcrossing	1,898,491	84,709	1,983,200
14WC11-F	Alameda	69	Oak	At 29th Ave. in Oakland	---	6/27/47	Lew Jones Const. Co.	Overcrossing	155,881	13,230	169,111
14WC9	Alameda	69	Oak	At Fruitvale Ave.	---	12/ 9/46	S. J. Amoroso Const. Co.	Substructure of Overcrossing	401,351	33,946	435,297
4TC3	Alameda	69	Oak	Cypress St. from Dist. Struct. to 7th St.	---	3/11/46	Lee J. Immel	Widen & Surface	150,410	---	150,410
14TC31-F	Alameda	69	Oak	19th Ave.	---	10/22/47	Carl N. Swenson, Inc.	Overcrossing & Approaches	403,580	31,019	434,599
0-14TC37-F	Alameda	69	Oak	Elmhurst Cr., Damon Slough, & East Creek Slough	---	4/ 1/48	E. H. Peterson & Son	Construct 3 Bridges	240,545	16,251	256,796
14WC12-F	Alameda	69	Oak	14th and 23d Avenues	---	3/17/48	Day Labor	Storm Drains	45,500	---	45,500
14WC10-F	Alameda	69	Oak	At Fruitvale Ave.	---	8/13/47	J. H. Pomeroy & Co., Inc.	Superstructure for Steel Over- crossing	635,286	18,228	653,514
0-4TC83-F	Alameda	69	Oak	At 23d Ave.	---	6/16/47	A. Soda & Son	Overcrossing	468,475	30,173	498,648
14WC10-F	Alameda	69	Oak	S.C.L. to High St.	3.3	5/20/49	Frederickson & Watson Const. Co.	Grade, Pave & Structures	1,373,439	125,550	*1,498,989
1-14TC84-F	Alameda	69	Oak	At High St.	---	4/ 1/49	A. Soda & Son	Overhead	676,749	68,000	*744,749
0-4TC45-F	Alameda	69	Oak	Bet. 35th Ave. & Oak St.	2.9	4/ 1/48	Frederickson & Watson Const. Co.	Grade & Surface	1,467,139	179,000	*1,646,139
0-4TTC4	Alameda	105	B	E. 14th St.	---	11/19/48	L. H. Leonardi Elec. Const. Co.	Signals & Lighting	41,427	2,878	44,305
4WC27	Alameda	105	B	On E. 14th St. Bet. Plaza Dr. & 158th Ave.	---	12/10/46	Wheeler Const. Co.	R. C. Culvert	11,716	2,826	14,542
1-4TC78	Alameda	105, 5	Hay	Through Hayward	1.8	4/ 1/49	Lee J. Immel	Plant Mixed Surface	82,574	15,000	*97,574

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
1-4TC95 14WLC33	Alameda	107	A	Rosewars Underking, 1.5 Mi. E. of Niles. At Alameda Creek	---	10/25/49 6/22/46	Elmer J. Warner R. G. Clifford & Louis Biasotti & Son	Grade & Surface	\$63,513	\$8,600	*\$72,113
1-14TTC3 13T1	Alameda	108	A	Vallecitos Cr., 9 Mi. SW. of Livermore	---	3/25/50	Lew Jones Const. Co.	Bridge & Overcrossing	416,828	40,929	457,757
4ANC14	Alameda	227	Oak	Rte. 75 to Park Blvd.	2.3	8/26/48	Day Labor	Repair Bridge	3,353	900	*4,253
	Alameda	Oak	Airport	Bet. Maitland Dr. & Earhart Rd. in Aux. Naval Air Sta.	0.2	7/10/46	Gallagher & Burk	Grade, Pave & Structures	375,000	---	375,000
4DC10	Ala, C.C.	FAS 801	---	Crow Canyon Rd.	1.8	7/ 8/48	Louis Biasotti & Son	Repair with P.M.S. & Construct Shldrs.	4,150	804	4,954
4DC11	Alameda	FAS 1023	---	On Jarvis Rd. bet. Dumbarton Rd. & Rte. 69	3.4	7/29/48	Clements & Co.	Grade & Pave	218,599	26,317	244,916
4DC1	Alameda	FAS 1030	---	On "A" St. & Redwood Rd. bet. San Lorenzo Cr. Bridge & Proctor Rd.	2.7	7/26/46	Hayward Bldg. Matl. Co.	Surfacing	158,927	5,000	*163,927
0-4TTC5P	Ala, S.M.	Var	Var	Various Locations.	---	12/ 3/48	R. O. Ferguson Co.	Grading & Surfacing	31,835	2,900	34,735
	Alameda	---	---	Various Locations.	---	---	---	Signals & Lighting	45,060	---	45,060
	Alpine	---	---	Various Locations.	---	---	---	Minor Contracts & D.L. Projects	110	---	110
0-10TC40	Amador	34	F	Cooks Sta. to E. of Hans Sta.	3.6	11/17/48	Westbrook & Pope	Minor Contracts & D.L. Projects	161,135	10,348	171,483
10WCI8P	Amador	34, 65	Jkn, C	N. of Jackson to E. & S. of Jackson	2.3	6/ 9/47	Fredrickson Bros.	Grade & Surface	543,649	57,955	601,604
14WLC52 10765	Amador	65 65	C, A C	See Calaveras 0.6 Mi. to 1.2 Mi. N. of Mokelumne River	0.6	4/ 6/48	Day Labor	Grade, Surface & Structures	19,941	1,292	*21,233
51-10TC1 10DC2	Amador	65 FAS 951	Ply	N.C.L. to S.C.L. Plymouth	0.9	4/ 1/50	P. J. Moore & Son	Surface	17,889	4,000	*21,889
	Amador	---	---	3.7 Mi. Ely of Pine Grove to No. Fork Mokelumne River	4.7	7/30/47	A. Teichert & Son, Inc.	Surface	196,725	26,305	223,030
	Amador	---	---	---	---	---	---	Grade & Surface	---	---	---

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
	Anador			Various Locations				Minor Contracts & D.L. Projects	\$7,759	\$20	\$7,779
1-3TC69	But, Sut	3	A	See Sutter County							
0-3TC51P	But, Sut	3	A, Grd, A, LHO	See Sutter County							
3TC24	Butte	3	B, C, Che	Bet. Oroville Wye & Nelson, Bet. Durham R.R. Xing & Chico, & Bet. Big Chico Creek & Sixth St. in Chico.	11.8	5/16/46	Lester L. Rice	P.M.S. on C.R.B. & Construct Shldrs.	108,024	7,052	115,076
0-3TC49P	Butte	3, 47	C, Che, D, Che	3 Locations, in and near Chico.	15.6	4/1/48	McGillivray Const. Co.	Grade & Surface	170,310	7,741	178,051
1-3TTC3-P	Butte	3, 47	Che	In Chico.		11/10/49	Clinton Electric Corp.	Signals & Lighting	20,364	900	*21,264
1-3TC57	Butte	21	B	Oroville to Feather River	4.1	4/12/49	Rice Bros., Inc.	Surface & Seal Coat	59,867	7,500	*67,367
2T42	Butte	21	C	Jarboe Pass-Plumas County Line	1.5	4/17/47	Day Labor	Resurfacing	6,477	71	6,548
1-14TC66	Butte	87	B	Butte Creek		5/12/49	Lew Jones Const't Co.	Bridge Repair	18,365	1,489	19,854
3DC11	Butte	FAS 757		2 Mi. E. of Chico to Paradise	9.2	11/19/48	Granite Const. Co.	Grade, Surface & Structure	387,889	32,810	420,699
3DC14	Butte	FAS 758		Cherokee Canal to Pennington Road	3.7	6/7/49	W. H. O'Hair Co.	Grade, Surface & Widen 2 Brs.	106,151	12,500	*118,651
3DC16	Butte	FAS 759		Oroville-Wyandotte Rd. to Oroville-Quincy Highway	2.3	6/22/49	Richter Bros.	Grade & Install Culverts	48,812	7,900	*56,712
14DC3	Butte	FAS 1046		Across South Fork of Feather River at Bidwell's Bar		3/26/47	Dey Contracting Co.	Bridge	106,035	13,472	119,507
	Butte			Various Locations				Minor Contracts & D.L. Projects	7,267	21	7,288
0-10TC33	Calaveras	24	B	2.6 Mi. E. to 4.9 Mi. E. of Valley Springs	4.2	4/29/48	A. Teichert & Son, Inc.	Surfacing	104,733	6,817	111,550
14WLC35	Calaveras	24	Ang	Across Angels Creek		6/24/46	J. Henry Harris	Concrete Bridge & Approaches	39,007	4,285	43,292
1-14TC75	Calaveras	65	A	Murray Creek		8/10/49	S. C. Lefever & D. Gerald Bing	Const. Bridge & Appr.	51,775	5,407	57,182

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14WLC62	Col. Ama	65	A, C	Across Mokelumne River	---	6/ 4/47	Charles Scott	Bridge Repair	\$6,515	\$529	\$7,044
14WC7	Calaveras	65	B	About 9 Mi. N. of Angels Camp	---	6/11/46	Bati Rocca	Construct Cattle Pass	4,787	1,548	6,335
10AN15	Calaveras	Access	---	Bet. Sandy Gulch Mill Pond & J. P. Lodge Rd.	---	5/22/45	Day Labor	Purchase Oil & Provide Engineering	5,450	---	5,450
10AN21	Calaveras	Access	---	Toyon to West Point	15.6	10/18/46	Day Labor	Repairs	26,107	828	26,935
10DC1	Calaveras	FAS 952	---	Route 65 to Mountain Ranch	8.9	7/11/47	Louis Biasotti & Son	Grade & Surface	171,770	16,600	*188,370
---	Calaveras	---	---	Various Locations	---	---	---	Minor Contracts & D.L. Projects	8,564	---	8,564
3TC6	Colusa	7	A	Arbuckle to 0.6 Mi. S. of Geneva	3.0	5/12/47	Day Labor	Improve Shldr.	10,834	30	10,864
3TC22	Colusa	7	A, B	Bet. 3 Mi. N. of Arbuckle & 4 Mi. S. of Williams	3.3	2/ 5/46	Harns Bros.	Grading & Plant Mixed Surfacing	220,143	34,347	254,490
1-3TC58	Col. Glenn	7	B, Wms, C, A	S. of Williams to S. of Willows	26.3	4/19/49	Westbrook & Pope	B.S.T. to Shoulders	32,998	5,600	*38,598
3TC31	Colusa	7	Wms	Bet. 239 Ft. S. of "F" St. & "D" St. in Williams	0.3	8/19/46	Harns Bros.	Repairs with P.M.S.	4,805	457	5,262
14DC10	Colusa	FAS 758	---	Sacramento River at Colusa	---	4/21/47	Lord & Bishop	Repair Bridge	133,585	6,878	140,463
3DC7	Colusa	FAS 1033 1035 1036	---	Williams to Stone Corral Creek	8.6	9/23/47	Frederickson & Kasler	Grade & Imported Borrow	83,300	790	84,090
---	Colusa	---	---	Various Locations	---	---	---	Minor Contracts & D.L. Projects	994	147	1,141
COFC-8	C.C. Sol.	7	A, F	On Carquinez Bridge	---	3/25/47	Minton & Kubon	Railings	26,534	---	26,534
COFC-2	Contra Costa	7	A	Carquinez Strait	---	1/ 4/49	Ben. C. Gerwick, Inc.	Repair Fender	57,018	---	*57,018
COFC-4	C.C. Sol.	7	A, F	Over Carquinez Strait at Crockett	---	7/22/49	Crabbe Electric	Install Electrical Equipment	8,693	---	*8,693
COFC-3	C.C. Sac	11	A, C	Antioch, San Joaquin Riv.	---	7/22/49	Pacific Bridge Painting Co.	Clean & Paint Bridge (Portions)	24,255	---	*24,255
COFC1	Contra Costa	11	A	San Joaquin River at Antioch	---	6/ 8/48	H. F. Lauritzen	Repair Bridge	4,456	---	4,456
4TC23	C.C.-Ala	14, 69	---	See Alameda County	---	---	---	---	---	---	---

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
4TC29	Contra Costa..	14	A	At San Pablo Bet. Wildcat Cr. & San Pablo Cr.	1.0	8/24/46	J. R. Armstrong	Widening & Paving	\$87,964	\$24,169	\$112,133
0-4TTC1P	Contra Costa..	14	A	San Pablo Ave. at 13th St.	---	8/ 5/48	H. C. Reid & Co.	Signals & Lighting	10,110	475	10,585
4TC31	Contra Costa..	14	B	Bet. Fourth St. & First St. in Rodeo	0.3	10/14/46	Lee J. Immel	Widen & Pave with A. C.	16,815	2,566	19,381
4T50	Contra Costa..	14	B	At Second St. & Parker Ave.	---	11/19/46	Day Labor	Traffic Signals	5,090	404	5,494
4TC38	Contra Costa..	14	B	At Rodeo Bet. Sixth St. & Fourth St.	0.3	5/28/47	Morgan Construction Co.	Widen with A. C. & Construct Shldr.	11,527	1,960	13,487
4TC40-P	Contra Costa..	14	ECr, Reh	In El Cerrito & Richmond on San Pablo Ave. at 10 Intersections, Bet. Stockton Ave. & McBryde	---	6/24/47	Severin Electric Co.	Traffic Signals	63,093	3,860	66,953
0-4TC61	Contra Costa..	14	Her, B	Pinole Overhead to East of Rodeo	1.5	6/30/48	J. Henry Harris	Grade, Pave & Structure	112,337	12,321	124,658
0-4TTC7-P	Contra Costa..	14	Pin	San Pablo & Tennent Ave.	---	6/ 9/49	L. H. Leonard Electric Const. Co.	Signals & Lighting	9,549	1,600	*11,149
4W39	Contra Costa..	69	ECr	Potrero Ave.	---	11/ 1/46	Day Labor	Signals	8,250	600	*8,850
0-4TMC15	Contra Costa..	69	Reh	Cutting Blvd. to 24th St.	1.0	3/ 1/49	Lee J. Immel	Resurfacing	21,757	---	21,757
0-4GCI7-P	Contra Costa..	69	Reh	47th St. to Garrard Blvd.	---	2/24/49	Tri-Cities Electrical Service, Inc.	Signals & Lights	51,166	---	*51,166
4W31	Contra Costa..	75	A	At Oakland St. & Moraga Rd.	---	8/14/46	Day Labor	Signals	15,332	798	16,130
4WC25	Contra Costa..	75	A, B	Bet. Broadway Tunnel & 3.5 Mi. E. of Walnut Creek	5.3	6/25/46	N. M. Ball Sons	Repair with Imported Borrow & P.M.S.	25,177	3,942	29,119
1-4TC84	Contra Costa..	75	A, WIC	3.5 Mi. E. of Broadway Tunnel to Rte. 107	5.6	5/ 9/49	J. R. Armstrong	Grade & Surface	308,811	38,800	*347,611
4WC26-F	Contra Costa..	75	B, C	Bet. Junct. Rte. 106 to 1 Mi. E. of Port Chicago Rd.	2.6	6/28/46	Harms Bros.	Grade & Pave	598,479	72,155	670,634
4WC23	Contra Costa..	75	C, D	Bet. Pittsburg & 4 Mi. E. of Brentwood	10.1	4/22/46	Lee J. Immel	Widen Shoulders & Bridge	82,463	9,422	91,885
1-4TC80	Contra Costa..	75	D	S.E. of Brentwood Jct. to Byron Rd.	1.4	4/ 1/49	C. M. Syar	Surfacing	53,818	9,500	*63,318
0-4TC59	Contra Costa..	75	D	Old River Bridge	0.2	6/18/48	J. R. Armstrong	Base and Surface	77,361	9,864	87,225
44WC2	Contra Costa..	75, 106	E, Cnd, C	Bet. Concord Ave. & 0.4 Mi. W. of Ohmer Station	2.3	3/12/46	Guy F. Atkinson Co.	Grade & P.C.C. Pavement	225,687	36,716	262,403

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
0-4TTC2	Contra Costa	75, 106	WTC, C	Main St. at Mt. Diablo Blvd. & Ygnacio Ave. in Walnut Creek & on Rte. 106 at Pacheco Rd.		8/16/48	Tri-Cities Elec. Service	Signals and Lighting	\$26,719	\$3,196	\$29,915
0-4TTC64	Contra Costa	106	A	Christie U.P. to Glen Frazer Station	1.7	6/29/48	Fredrickson & Watson Const. Co.	Grade and Surface	367,819	38,053	405,872
4W50	Contra Costa	106	C	Bet. Muir Sta. & Rte. 75	1.0	3/31/47	Day Labor	Resurfacing	18,353	529	18,882
1-4TTC79	Contra Costa	106	C	Martinez Rd. to Willow Pass	3.6	4/1/49	Gallagher & Burk, Inc.	Plant Mixed Surface	155,201	22,000	*177,201
0-4TTC57	Contra Costa	107	A	Alameda C. Line to 0.2 Mi. S. of San Ramon Cr.	4.2	5/25/48	Granite Const. Co.	Grade and Surface	180,282	16,155	196,437
4WC29-P	C.C. Ala.	107, 5	A, B	See Alameda County							
14DC9	Contra Costa	FAS 797		Across Pacheco Slough		4/14/47	Duncanson-Harrelson Co.	Swing Bridge	217,938	13,349	231,287
4DC10	Contra Costa	FAS 801		See Alameda County							
	Contra Costa			Various Locations				Minor Contracts & D.L. Projects	34,164		34,164
1T44	Del Norte	1	A	High Prairie Creek		9/10/47	Day Labor	Repair Bridge	5,898	162	6,060
1T45	Del Norte	1	A	At Hunter Creek		11/17/47	Day Labor	Redeck Bridge	6,479	184	6,663
1T17	Del Norte	1	A	At Panther Cr. Bridge Br. No. 1-25		9/28/45	Day Labor	Repair Bridge	6,212	111	6,323
1T74	Del Norte	1	A, B	Richardson Creek to Klamath	6.28	12/1/49	Day Labor	Seal Coat	5,780		5,780
1-TC34	Del Norte	1	A, B	Richardson Creek to S. of Crescent City	6.3	4/1/49	Harms Bros. & C. M. Syar	Plant Mixed Surface	259,578	22,078	281,656
1TC13	Del Norte	1	B	Bet. 6.3 Mi. & 2.6 Mi. S. of Crescent City	3.7	5/3/46	W. C. Railing	Imp. Base Mat'l. & Seal Coat	105,329	9,330	114,659
0-1TC30	D.N., Hum	1	K, A	See Humboldt County							
1-1TC27	Del Norte	46	A	At Turwar Creek, about 3 Mi. E. of Klamath	0.7	5/5/48	Baldwin-Straub Corp. & Arthur B. Siri, Inc.	Bridge & Appr.	200,611	21,257	221,868
1-1TC35	Del Norte	81	A	Bear Creek	0.3	4/7/49	C. E. Johnson	Grade & Surface	32,850	7,073	*39,923
14DC42	Del Norte	FAS 984		Hunter Creek		8/13/48	Baldwin-Straub Corp. & Arthur B. Siri, Inc.	Const. Bridge & Appr.	62,880	6,114	68,994

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14DC34	Del Norte	FAS 985		Across Smith River about 12 Mi. N.E. of Crescent City		3/11/48	Underground Const. Co.	Const. Bridge	\$85,483	\$10,841	\$96,324
3TC23-F	Del Norte			Various Locations				Minor Contracts & D.L. Projects	11,851	40	11,891
3TC23-F	El Dorado	11	B	Bet. Shingle Springs & 1.25 Mi. W. of El Dorado	3.4	2/19/46	Utah Construction Co.	Grading & Plant Mixed Surfacing	271,157	47,741	318,898
3TC90	El Dorado	11	E.F.H.T	Placerville to Mays Junction (Portions)		7/1/49	Day Labor	Parking Areas	5,840		5,840
3TC84	El Dorado	11	F	Pacific House Curve	0.1	4/15/48	Day Labor	Widen Curve	5,826		5,826
14WLC41	E.D., Pla	65	A, A	See Placer County							
3WC17	El Dorado	93	A	Bet. Rte. 65 near Placerville & Pino Grande Rd.	3.2	1/24/46	Day Labor	Widen, Improve Alignment & Oil Treat	29,913	2,393	32,306
3TC86	El Dorado	93	A	Placerville to Georgetown	1.1	6/14/48	Day Labor	Widen & Surface	44,983		44,983
3DC12	El Dorado	FAS 1095		Diamond Springs to Bell Ranch	4.7	1/19/49	M. W. Brown	Grade & Seal Coat	94,409	11,722	106,131
3DC15	El Dorado	FAS 1097		Lotus-Rescue Road to Rte. 65	3.9	6/27/49	Tyson & Watters Co.	Grade & Surface	57,014	10,260	*67,274
3DC2	El Dorado	FAS 1099		Georgetown to U.S. Ranger Station	3.6	6/26/47	Miles & Bailey	Grade & Surface	73,507	10,621	84,128
6TC4-F	El Dorado			Various Locations				Minor Contracts & D.L. Projects	14,094		14,094
6TC7	Presno	4	A, Pow.B	Bet. ¼ Mi. S. of Fowler & Calwa Overpass	6.5	10/8/46	Gunner Corporation & J. E. Haddock, Ltd.	Grade & Plant Mixed Surfacing	796,223	71,349	867,572
6-6TC15	Presno	4	A, Pow.B	Bet. ¼ Mi. S. of Fowler & Calwa Overpass	6.4	8/27/47	F. Gunner Gramaty	Barrier Curb	16,509	1,400	17,909
6-6TC15	Presno	4	A	Bet. Solma and Fowler	3.4	7/29/48	Matthew & Jorgenson	Barrier Posts	9,742	1,458	11,200
6GTC1-FP	Presno	4	B, Fre	Presno City Limits to San Benito Ave.	1.2	6/30/47	Guy F. Atkinson Co.	Grade, Pave & Structure	1,366,751	143,612	*1,510,363
6TC3	Presno	4	B, Fre	Bet. Calwa Overpass & Fresno	2.1	1/17/46	Marshall S. Hamrahan	Grading & P.C.C. Pavement	374,675	43,700	418,375
1-6TC18	Presno	4	B, Fre	Church Ave. to Broadway	1.2	5/6/49	Jamnoch Nurseries	Landscaping	20,881	4,054	24,935
0-14TC44-P	Presno, Mad	4	C, A	San Joaquin River No. of Herndon	1.0	6/10/48	Erickson, Phillips & Westberg	Const. Bridge & Appr.	622,736	46,386	669,122

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
6WC6-P	Fresno	4, 125	B, A	Bet. Fowler & Calwa Overpass & Bet. 4.6 Mi. N. of Kings County Line & Mountain View Ave.	11.0	4/ 2/47	Gunner Corporation	Resurface with Plant Mix Surfacing	\$110,364	\$9,000	\$119,364
6TMC1-P	Fresno	4	Fow	Merced St. & Rte. 4		12/31/47	Severin Elec. Co.	Signals & Lighting	13,280	1,290	14,570
0-6TC13	Fresno	4	Fre, C	Belmont Circle to Clinton Ave.		5/19/48	Tri-Cities Elec. Serv.	Signals & Lighting	19,956	1,310	21,266
0-6TC12	Fresno	4	Fre, C	Belmont Circle to Clinton Ave.	1.8	4/15/48	Guy F. Atkinson Co.	Grade & Pave	226,533	26,428	252,961
6TC11-P	Fre, Tul	4	Kngh, A	See Tulare County							
6TC8-P	Fre, Tul	4	Kngh, A E, D								
14WLC43	Fresno	41	P	0.5 Mi. S. of Kingsburg to Selma	5.2	10/20/47	N. M. Ball & Sons	Grade & Pave	631,900	65,941	697,841
14WLC27	Fresno	41	P	Across Kings Slough		1/ 8/47	Lord & Bishop	Reconstruct Bridge	21,573	1,098	22,671
				Bet. 2 Mi. E. of Mendota & 2 Mi. W. of Tranquility Rd.		12/21/45	Dan Caputo & Edward Keeble	12 R. C. Bridges & R. C. Box Culvert	194,189	14,433	208,622
14WLC60	Fresno	41	M	Across Colony & Helm Canals		9/ 5/47	E. G. Perham	Reinforced Concrete Bridges	49,805	4,029	53,834
6T22	Fresno	41	S	Alta Main Canal		11/12/48	Day Labor	Redeck Bridge	6,994		6,994
6W8	Fresno	76	B	At Big Dry Creek, Br. No. 42-91		9/13/46	Day Labor	Widen Bridge with R. C. Slab	7,303	25	7,328
6WC5-F	Fresno	125	C	Bet. Shields Ave. & Herndon Ave.	4.0	11/14/46	Basich Bros. Const. Co. & Basich Bros.	Grade & Pave	306,267	32,151	338,418
1-14TC80	Fresno	138	A, Cing	At Warthan Creek in Coalinga		9/ 8/49	Thomas Const. Co.	Const. Bridge & Appr.	40,580	6,779	47,359
6DC5	Fresno	FAS 568		Highland Ave. Bet. Kings Co. Line & Elkhorn Ave.	3.3	6/ 7/47	Valley Paving & Const. Co.	Grading & Surfacing	142,214	8,723	150,937
6DC17	Fresno	FAS 568		Elkhorn Ave. to Rte. 4	6.4	1/26/49	Phoenix Const. Co. & Oilfields Trucking Co.	Grade & Surface	215,720	16,983	232,703
14DC12	Fre, Kin	FAS 623		See Kings County							

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
6DC1	Fresno	FAS 809		On Fresno-Coalinga Rd. Bet. Mt. Whitney Ave. & State Highway Rte. 10	8.6	11/13/46	Louis Biasotti & Son	Grade & Surface	\$153,818	\$1,550	\$155,368
14DC16	Fre, Mad	FAS 811		Across San Joaquin River & Overflow at Firebaugh		5/19/47	Charles MacClosky Co.	2 Steel Bridges	251,944	13,320	265,264
6DC16	Fresno	FAS 814		On Clovis Ave. Bet. Ventura Ave. & Shaw Ave.	5.0	11/ 9/48	Ted F. Baum	Widen & Surface	144,069	12,053	156,123
6DC19	Fresno	FAS 817		Manning Ave., US 99 to Indianola	3.9	8/ 3/49	Oilfields Trucking Co. & Phoenix Const. Co., Inc.	Grade & Surface	141,000	11,770	152,770
6DC3	Fresno	FAS 823		On Reed Ave. Bet. Manning Ave. & Rte. 41	8.0	5/16/47	A. Teichert & Sons, Inc.	Grade & Surface	197,337	14,035	211,372
6DC9	Fre, Tul	FAS 1142		0.1 Mi. W. of Tulare County Line to 1 Mi. E. of Kings River	1.9	2/27/48	P. J. Moore & Son & Harms Bros.	Grade & Bit. Surf. Treat.	59,156	4,312	63,468
	Fresno			Various Locations				Minor Contracts & D.L. Projects	62,293	338	62,631
1-3TC62	Glenn	7	A, Wios, B, C, Ori.	0.3 Mi. S. of Willows to Tehama Co. Line	19.7	5/20/49	W. C. Railing	Resurface	70,072	6,550	*76,622
1-3TC58	Gle, Col	7	C, A	See Colusa County				Repair Bridge	13,983	1,608	15,591
1-14TC74	Glenn	45	B	At Butte City		7/23/49	Lord & Bishop	Bridge Superstructure	233,897	18,900	*252,797
14WLC61	Glenn	45	B, C	Sacramento River & Razor Slough		9/17/47	Judson - Pacific - Murphy Corp.	Bridge Substructure & Appr.	391,458	40,474	431,932
14WLC46	Glenn	45	B, C	Sacramento River & Razor Slough	0.6	2/26/47	Johnson-Western Co.	Redeck 2 Bridges	75,874	10,463	86,337
0-14TC36	Glenn	45	C	Sacramento Riv. Overflow & Campbell Slough		4/ 1/48	Chas. MacClosky Co.	Repair Substructure	7,268	32	7,300
3WL23	Glenn	47	A	Glenn-Colusa Canal, Br. No. 11-18		2/21/46	Day Labor	Replace Bridge	13,623	2,232	15,855
1-14TC60	Glenn	47	A	Glenn-Colusa Irrigation Canal		4/ 1/49	Snaul Const. Co.				
3TR95	Glenn	47	Ori	Bet. 1st & 2d Sts. in Orland		2/ 9/50	Day Labor	Correct Drainage	5,445		

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
3DC4	Glenn	FAS 531		Willows to Athena	8.5	7/23/47	H. Earl Parker, Inc.	Grade, Surface & Bridge	\$123,227	\$12,161	\$135,388
14DC43	Glenn	FAS 1117		At Salt Creek		9/29/48	George M. Carr & Bati Rocca	R.C. Bridge	17,727	2,436	20,163
14DC33	Glenn	FAS 1119, 1120, 1121, 1122		Across Central & Provident Canals at Various Locations		12/19/47	Erickson, Phillips, & Weisberg	8 R.C. Bridges	174,055	14,105	188,160
1-14DC65	Glenn	FAS 1121		Willow Cr. to 4 Mi. W. of Rte. 45		2/11/50	Bos Const. Co.	Widen Bridge	9,071	1,455	*10,526
1TC20	Glenn			Various Locations				Minor Contracts & D.L. Projects	3,618		3,618
1TC18	Humboldt	1	D, E	Bet. Jordan Cr. & South Scotia Bridge	1.2	6/12/47	Clements & Co.	Plant Mixed Surfacing & Seal Coat	30,449	2,564	33,013
0-1TC25	Humboldt	1	E	Bet. Greenlaw Bluffs & Scotia	3.2	4/ 2/47	Clements & Co.	Plant Mixed Surfacing & Seal Coat	90,188	7,997	98,185
1TC11	Humboldt	1	E, F, Fta.	Bet. N. Scotia Br. & 16th St. in Fortuna	2.8	4/28/48	Mercer-Fraser Co.	Grade & Pave	548,892	68,126	617,018
1TC8	Humboldt	1	G	Bet. Loleta & Field's Landing	4.0	4/16/46	Mercer-Fraser Co.	Reinforce Base & P.M.S.	93,955	9,064	103,019
14TC51	Humboldt	1	G, I, J	Bet. Loleta & Patrick's Point	7.5	5/21/45	Mercer-Fraser Co.	Repair with Imp. Base & P.M. Bit. Matl.	181,755	18,869	200,624
1TC12	Humboldt	1	H	Eureka Slough		6/28/48	Tom Hull	Reconstruct Bridge Fenders	18,004	2,495	20,499
1TC12	Humboldt	1	J	Bet. Patrick's Point & Big Lagoon	3.4	4/30/46	Mercer-Fraser Co.	P.M.S. on Imp. Matl. Base	98,347	6,865	105,212
0-1TC23	Humboldt	1	J	At Lookout Point		8/19/49	Day Labor	Hydrauger Drains	24,198		*24,198
0-1TC30	Humboldt	1	K	2.8 Mi. to 7.6 Mi. N. of Orick	4.8	4/ 1/48	Mercer-Fraser Co.	Grade & Surface	172,280	14,399	186,679
1TC33	Humboldt	1	K, A	2 Mi. S. to 5 Mi. N. of Hum.-D.N. County Line	2.5	8/17/48	Harms Bros. & C.M. Syar	Base & Surface	121,313	8,908	130,221
0-1TC33	Humboldt	1	K	7.6 Mi. to 10.4 Mi. N. of Orick	2.8	4/ 1/49	Mercer-Fraser Co.	Surface	104,203	9,327	113,530
0-1TC33	Humboldt	1	Eur	S. City Limits to Eureka Slough Bridge	2.6	7/16/48	Mercer-Fraser Co.	Resurfacing	95,602		95,602
14WLC28-F	Humboldt	20	A	At Mad River		1/ 5/46	Mercer-Fraser Co.	Bridge & Approaches	213,710	25,542	239,252

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
1WC12-F	Humboldt	20	B	Bet. 1.2 Mi. E. of Korb Rd. & 2.7 Mi. E. of Redwood Summit.	10.0	3/26/47	W. C. Railing	Base & Stockpile Screenings	\$97,418		\$97,418
1W25	Humboldt	20	B, C	Bet. Blue Lake & 1 Mi. E. of Redwood Creek	16.4	9/17/46	Day Labor	Grading & Seal Coat	193,639	\$6,912	200,551
1WC11	Humboldt	20	B, C	Bet. Redwood Summit & 1 Mi. E. of Redwood Cr.	4.7	10/25/46	W. C. Railing	Imported Base Material	59,973	2,775	62,748
14W1C51	Humboldt	20	C	Across Redwood Creek		5/28/47	Osborne Engr. Co.	Repair Steel Truss	10,991	333	11,324
14W1C59	Humboldt	20	C	Across Redwood Creek		6/30/47	Tom Hull	Erect Steel Truss Span	15,546	1,823	17,369
41W10	Hum. Tri.	20	D, C, D	Bet. Willow Cr. & Crossing of Trinity River		1/23/42	Prison Labor	Const. Camp; Grade & Surface	1,115,364	86,105	1,201,469
1T65	Hum. Tri.	20	D, C, D	Willow Creek to Whites Bar	15.2	7/1/48	Prison Labor	Grade & Surface	235,135	18,203	253,338
1T89	Hum. Tri.	20	D, C, D	Willow Creek to Whites Bar	15.2	7/1/49	Prison Labor	Grade & Surface	305,667	22,733	328,400
1WL28	Humboldt	35	B	At Slide Bridge		8/14/46	Day Labor	Replace Bridge	6,015		6,015
1T72	Humboldt	46	D, E	Weitchpee to Orleans	15.85	9/6/49	Day Labor	Grade & Surface	23,962		23,962
1-14TC61	Humboldt	46	E	Camp Creek		4/1/49	G. M. Carr & Bati Rocca	Reconst. Bridge	45,768	4,186	49,954
0-1TC29	Humboldt	46	F	Bet. Peach Cr. & 0.8 Mi. Northerly	0.9	8/23/48	Fred J. Maurer & Sons	Grade, Surface & Culvert	108,440	15,079	123,519
1T76	Humboldt	56	A	At Salt River bet. Fernbridge & Ferndale	0.2	5/17/50	Day Labor	Const. Bridge	7,000		*7,000
14W1C50-F	Humboldt	84, 46	B, C, D	At Klamath River	0.5	5/12/47	Clifford A. Dunn	Bridge Substructure & Appr.	272,657	32,364	305,021
14WC16-P	Humboldt	84, 46	B, C, D	Klamath River at Weitchpee	0.6	9/23/47	Guy F. Atkinson Co.	Const. Bridge & Appr.	376,766	24,035	400,801
1DC1	Humboldt	FAS 501		Bet. Arcata & Ryans Slough Bridge	8.0	10/3/46	Mercer-Fraser Co.	Grade & Surface	193,830	18,087	211,917
1DC4	Humboldt	FAS 968		Bet. Jet. Rte. 20, E. of Blue Lake & Korb Rd.	1.3	5/24/47	Mercer-Fraser Co.	Grade & Surface	54,766	4,618	59,384
1DC2	Humboldt	FAS 970		On Elk River Rd. Bet. Jet. with Rte. 1, S. of Eureka & Elk River School	2.2	3/26/47	Mercer-Fraser Co.	Grade & Seal Coat	62,516	4,845	67,361
1DC7	Humboldt	FAS 976		Bull Creek Flat State Park to 7.3 Mi. Westerly	7.3	7/21/48	John Burman & Sons	Grade	169,800	22,594	192,394

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
1DC8	Humboldt	FAS 977		Whittemore Grove State Park to 2.5 Mi. Westerly	2.5	7/20/48	M. Malfitano & Son, Inc., & Macal Improvement Co., Inc.	Grade	\$79,896	\$12,283	\$92,179
14WC14-F	Humboldt			In Whittemore Grove State Park across S. Fork of Eel River near Redway		9/16/47	Reed & Tuttle	Repair Bridge	42,034	5,647	47,681
	Humboldt			Various Locations				Minor Contracts & D. L. Projects	30,364		30,364
0-14VC71	Imperial	12	A, B, C	10 Mi. to 25 Mi. W. of El Centro		9/29/48	R. M. Price & O. B. Pier-son	Redeck 15 Bridges	101,487	12,208	113,695
14VC46	Imperial	12	B	Across Apache Wash & Sandy Ditch		1/26/48	E. G. Perham	Redeck 2 Bridges	29,129	2,526	31,655
1-11VC42	Imperial	12	B, C	Plaster City to El Centro	6.0	4/21/49	Roland T. Reynolds	Road Mixed Surface	41,365	4,467	45,832
11VC15-F	Imperial	12, 26	C, ECn, F, Imp, G, Brw	El Centro to Brawley	13.1	5/16/47	Basich Bros. & Basich Bros. Const. Co.	Grade & Surface	1,524,220	124,076	1,648,296
11V48	Imperial	12, 26	C, ECn, F, Imp, G, Brw	El Centro to Brawley	13.1	5/18/48	Day Labor	Signs & Stripe	5,192		5,192
11VC18	Imperial	26	A, B, C	Trifolium Canal to Sandy Beach Rd.	15.1	9/22/47	R. A. Erwin & Cee Tee Const. Co.	Resurface Bridge	434,736	55,924	490,660
14VC16-F	Imperial	26	B, C	At Lone Tree Wash & San Felipe Creek		10/31/46	Bent Const. Co.	Bridge & Approaches	254,058	17,765	271,823
11XC12	Imperial	26, 27	J, ECn	Bet. Calexico & El Centro & in El Centro	12.7	8/7/46	Tanner Const. Co.	Grade Portions, Improve Shldr. & Plant Mixed Surfacing	237,389	26,799	264,188
1-11VC05-P	Imperial	26, 187	Brw	Main St. at 1st & 6th Sts.		3/17/50	Westates Elec. Const. Co.	Signals & Lighting	11,463	1,500	*12,963
0-11VMC15-P	Imperial	26, 187	Clx, Brw	In Calexico & Brawley	3.2	8/13/48	Basich Bros. & Basich Bros. Const. Co.	Resurfacing	98,204		98,204
11VC20-P	Imperial	26	ECn	Intersections of 4th St. with Main St. & 8th St. with Adams Ave. in El Centro		1/20/48	C. E. Seymour	Traffic Signal Systems	19,383	371	19,754
11VC14-F	Imperial	26	ECn	On 4th St. & Adams Ave., Bet. Main St. & Imperial Ave.	1.2	1/28/47	R. E. Hazard Const. Co.	Grade & Pave	347,975	37,694	385,669
11VC34	Imperial	26	ECn, Imp	In El Centro & Imperial		6/29/48	California Elec. Works	Signals & Lighting	20,632	328	20,960
14VC35	Imperial	27	B	Bet. Grays Wells & Winterhaven		9/8/47	C. B. Tuttle Co.	Repair 12 Bridges	38,426	3,260	41,686
14VC18	Imperial	27	B	Near Winterhaven		8/30/46	Tanner Const. Co.	Repair 8 Bridges	54,453	4,691	59,144

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
0-14VC60	Imperial	27	D, A	East High Line Canal	0.5	6/29/48	Basich Bros. & Basich Bros. Const. Co.	Bridge & Approaches	\$112,360	\$14,582	\$126,942
1-11VC49	Imperial	187	B, C	Sandia & Alamo Rio Turns	1.3	11/14/49	E. C. Young & Co.	Grade & Surface	61,821	13,800	*75,621
1-11VC44	Imperial	187, 201	BC, AB	Holtville to Brawley & Heber to Brawley	3.4	5/ 6/49	Warren Southwest Inc.	Surface	39,465	5,213	44,678
0-14VC72	Imperial	198	A	Condit & Bondit Ditches		9/29/48	R. M. Price & O. B. Peterson	2 R.C. Bridges	25,156	4,624	29,780
0-11VC26	Imperial	201, 187	ABC, C	Rte. 26 to Calipatria & Curlew to Alamo Rio	6.6	4/ 9/48	MacArthur & Son	Resurfacing	80,310	4,223	84,533
11XC18	Imperial	201, 187	A, B, C, A, B, C	Bet. Jct. Rte. 26, 1.5 Mi. E. of Heber & 1.9 Mi. S. of Calipatria & Bet. 3.6 Mi. N. of Bond's Corner & Alamo Rio	12.0	6/30/47	MacArthur & Son	Repair with Road Mixed Surface	80,578	2,764	83,342
1-11VC53	Imperial	201	B	Rockwood Canal, 2.5 Mi. S. of Brawley	0.4	1/12/50	Arthur A. Johnson	Const. Bridge	25,392	7,500	*32,892
14VC38	Imperial	202	A, B	At New River & Greeson Wash.	0.16	10/20/47	G. W. Peterson	Bridges & Approaches	54,366	5,622	59,988
11X35	Imperial	202	C	At Briar & Central Main Canals		12/ 9/46	Day Labor	Lengthen Central Canal Bridge & Place Embankment Protection at Both Structures	8,750	12	8,762
14DC61	Imperial	FAS 649		West Side Main & Sumac Canals		12/13/49	T. A. Kvale	Const. Bridge & Siphon	32,835	4,500	*37,335
11DC3	Imperial	FAS 649		N. of New River to W. of Calipatria	20.1	4/29/49	Hensler Const. Corp.	Surfacing	426,390	55,500	*519,225
	Imperial			Various Locations				Minor Contracts & D.L. Projects	20,611	2	20,613
1-9VC22	Inyo	23	D, Bis, E	At Bishop	0.4	6/14/49	Bishop Engineer & Const. Co.	Resurface	44,365	5,079	49,444
9VC6-F	Inyo, Kern	23	G, E	See Kern County							
9VC11	Inyo	23	H, I	From 2.0 Mi. S. to 10.7 Mi. S. of Olancho	0.4	1/21/48	Bishop Engr. & Const. Co.	Grade & Bit. Surf. Treatment	12,669	2,517	15,186
9VC10-F	Inyo	23	L, M	Alabama Gates to Manzanar	4.3	12/18/47	Basich Bros. Const. Co., Peterson Bros. & O. B. Olfields Trucking Co., & Phoenix Const. Co., Inc.	Grade, Surface & Structures	223,217	27,224	250,441
1-9VC19	Inyo	23	L, M, A, D	Lone Pine to Bishop	18.1	5/ 6/49		Surface Shoulders	55,459	6,788	62,247

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
1-14VC85	Inyo.....	76	A	Owens River & Lower McNally Canal.....	---	4/26/49	Jas. R. Mathews Excavating Co.....	Structures & Approaches	\$45,148	\$5,086	\$50,234
9RXC1	Inyo.....	76	A	Bet. Laws & Mono County Line.....	---	9/18/47	Bishop Engr. & Const. Co.	Construct Fence.....	6,146	821	6,967
9XC4	Inyo.....	76, 127	A, Bis, C	Bet. Rte. 23 & Mono County Line, in Bishop, Bet. W. City Limits & Rte 23 & Bet. Rte. 23 & Keeler.....	3.2	5/16/47	Browne & Krull.....	Road Mix Surfacing.....	17,539	2,215	19,754
1-9VC27	Inyo.....	127	C, D	S.P.R.R. Xing W. of Keeler to Soda Plant.....	5.4	11/9/49	Rice Brothers Inc.....	Grade & Surf.....	93,441	15,650	*109,091
1-9VC24	Inyo.....	127	D	Soda Plant to 8 Mi. S.....	7.1	7/12/49	R. A. Erwin.....	Grade & Surf.....	81,179	16,300	*97,479
9VC9	Inyo.....	127	N	At Shoshone.....	0.7	11/13/47	A. A. Edmonson.....	Grade & Road Mix Surfacing.....	26,455	5,198	31,653
9V26	Inyo.....	212	D, E	Shoshone to State Line.....	19.6	11/9/49	Day Labor.....	Improve Roadway.....	24,832	744	*25,576
9DC9	Inyo.....	FAS 1065	---	SW. End Wildrose Canyon to Death Valley.....	5.7	7/25/49	Dico Inc. & Dix-Syl Const. Co., Inc.....	Grade & Surface.....	36,764	7,682	44,446
9DC5	Inyo.....	FAS 1065	---	N. of Trona to Water Canyon.....	4.9	1/15/48	Swedlow Engr. Co., Inc.....	Grade & Bit. Surf. Treat.....	130,491	21,975	152,466
9DC8	Inyo.....	FAS 1065	---	N. of Trona to Wild Rose Canyon.....	15.0	12/14/48	Arthur A. Johnson.....	Grade & Pen. Treat.....	88,212	14,337	102,549
9DC6	Inyo.....	FAS 1068	---	Independence to Kearsarge.....	4.5	1/26/48	Brown & Krull.....	Grade, Pen. Tr., & Widen Bridge	47,121	6,853	53,974
9DC1	Inyo.....	FAS 1070	---	Near Bishop, on Warm Springs Rd. & Poleta Rd.....	4.4	5/16/47	Basich Bros. Const. Co. & Basich Bros.....	Grade, Surface, & 2 Bridges.....	116,915	8,861	125,776
9DC4	Inyo.....	FAS 1071, 1069	---	On Pine Cr. Rd. & Glacier Lodge Rd.....	4.2	9/22/47	Westbrook & Pope.....	Grade & Surface.....	79,874	11,292	91,166
---	Inyo.....	---	---	Various Locations.....	---	---	---	Minor Contracts & D.L. Projects	17,632	---	17,632
6VC6	Kern.....	4	A	Bet. 1.6 Mi. & 1.25 Mi. S. of Grapevine Station.....	5.0	5/16/46	Griffith Company.....	Traffic Deflector.....	21,130	2,350	23,480
1-6VC33	Kern.....	4	A	Fort Tejon to N. of Grapevine.....	1.8	4/19/49	Hensler Const. Corp.....	Traffic Deflector.....	196,285	11,258	207,543
1-6VC38	Kern.....	4	A	Oak Glen to Grapevine Station.....	---	9/2/49	Griffith Co.....	Resurface.....	34,141	3,469	37,610

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
0-6VC17	Kern	4, 140	B, C, B	Grapevine to Switzers & Mi. 6.74 to Rte. 4	29.8	4/10/48	Dico, Inc. & Dix-Syl Const. Co., Inc.	Grade & Surface	\$377,334	\$21,672	\$399,006
0-6VC36	Kern	4	B, C	Grapevine Sta. to Switzers	19.1	6/22/49	Griffith Co.	P.M.S. Borders	36,225	2,732	*38,957
6VA1	Kern	4, 140	BC, B	Grapevine to Switzers & Mi. 6.74 to Rte. 4	29.8	7/12/48	Day Labor	Stripe & Shoulders	11,436		11,436
6VC5	Kern	4	C, Bkd	Bet. Brundage Lane & 24th St.	1.9	4/22/46	Griffith Company	Grade & P.C.C. & A.C. Paving	435,612	48,101	483,713
6VC11-FP	Kern	4	C, Bkd	Bet. Brundage Lane & 21st St.	10/23/46	10/23/46	Oilfield Electric Co.	Traffic Signals	42,581	4,971	47,552
0-6VC24	Kern	4	C	S. Chester Ave. & Strader Grade Xing		6/28/48	L. H. Leonardi Electric Const. Co.	Signals & Lights	10,997	1,168	12,165
0-6VC20	Kern	4	C	Bet. Hoskins Rd. & Brundage Lane	5.1	5/19/48	Griffith Co.	Grade & Pave	750,759	67,383	*818,142
1-6VC30	Kern	4	D, E	Snow Rd. to Cawelo	7.6	4/ 1/49	Peter Kiewit Sons' Co.	Resurface	107,858	9,919	117,777
6VC7	Kern	4	D, E	Bet. Standard Oil Tank Farm & Cawelo	5/ 7/46	5/ 7/46	Geo. Von Kleinsmid	Barrier Posts	7,028	2,800	9,828
0-6VC28	Kern	4	D, E	Snow Rd. to Cawelo	4.2	8/ 5/48	C.J.B. Const. Co.	Barrier Posts	11,770	1,369	13,139
6VC10-F	Kern	4	E	Bet. Cawelo & Famoso Underpass	6.7	10/17/46	Griffith Company	Grade & Pave	517,023	53,332	570,355
6VC18	Kern	4	E	Cawelo to Famoso U.P.	6.4	4/19/48	E. G. Perham	Barrier Posts	20,552	2,827	23,379
6VC8	Kern	4	F, Dln	Bet. Famoso & Cecil Ave. in Delano	10.4	5/27/46	Griffith Company	Repair with P.M.S.	93,215	8,478	101,693
6VC25	Kern	4	G, D	Minkler U.P. to Snow Rd.	1.4	6/28/48	Dico, Inc. & Dix-Syl Const. Co., Inc.	Surfacing	14,324	1,178	15,502
6VC13-FP	Kern	4, 141	Bkd, G, D, A	Bakersfield to Snow Rd. & Calloway Canal to Rte. 4	3.6	6/ 9/47	Griffith Co.	Grade, Pave & Structure	1,279,492	125,707	1,405,199
1-6VC40	Kern	4	Bkd	Bet. 21st St. & "H" St.		10/ 4/49	Els-Hokin & Galvan	Signals & Lighting	42,090	3,300	*45,390
1-6VC37	Kern	4	Bkd	Bet. 23rd St. & "H" St. N. of Garces Circle	1.0	8/10/49	Griffith Co.	Grade & Pave	331,839	36,000	*367,839
0-6VC16	Kern	23	A	In Mojave	2/21/49	2/21/49	G & H Paving Co.	Railing	6,421	1,268	7,689
1-6VC21	Kern	23	B	Mojave to 0.8 Mi. North	0.8	6/ 2/49	Davis & Swartz	Grade & Surface	37,809	8,332	46,141
0-6VC17	Kern	23	C	Ituners to Ricardo	0.4	3/ 2/49	Peterson Const. Co.	Embankment Protector	20,219	3,108	23,327
0-6VC13	Kern	23	C	Ituners to Ricardo	2.4	5/12/48	Westbrook & Pope	Grade & Surface	38,198	5,867	44,065
9VC4-F	Kern	23	D	At Freeman Gulch		2/19/46	E. W. Elliott Const. Co.	Bridge & Approaches	77,962	14,815	92,777

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
9VC6-F	Ker, Iny	23	E, G	Bet. Indian Wells & Little Lake	2.7	4/21/47	Basich Bros. Const. Co. & Basich Bros.	Grade, Surface & Bridge.	\$203,937	\$19,477	\$223,414
6X14	Kern	33	B	Bet. Blackwells Corner & Harts Sta.		3/21/46	Day Labor	Restore Borders	16,996	25	17,021
6XC7	Kern	33	C	Bet. Lost Hills & Wasco	4.7	4/ 5/46	Oilfields Trucking Co. & Phoenix Const. Co.	Widen Shldrs.	25,813	4,198	30,011
6XC8	Kern	33	C	Bet. 8.7 Mi. & 2.0 Mi. W. of Wasco	6.7	6/24/46	Griffith Company	Repair with P.M.S. & Seal Coat	54,324	7,000	61,324
6XC13-P	Ker, Tul	33, 4	D, A	See Tulare County							
6X21	Kern	57	A	Bet. South Boundary & Maricopa	2.4	3/20/47	Day Labor	Resurfacing	17,233	250	17,483
51-6VC1	Kern	57	B	6 Mi. W. to 2 Mi. W. of San Emidio Road	4.0	4/ 1/50	Rand Const. Co., Inc.	Surface	32,809	8,800	*41,609
6X25	Kern	57	C	At Teucya Creek		5/ 1/47	Day Labor	Arch Culvert	9,798	152	9,950
6XC15	Kern	57	E	Bet. 0.4 Mi. W. of Cottonwood Cr. & Cottonwood Cr.	0.4	6/17/47	James E. Anderson	Scarify & Subsoiling	3,685	700	4,385
6V40	Kern	57	I	Bodfish Creek		7/ 1/48	Day Labor	Culvert	9,985	138	10,123
6VC16-Y	Kern	57	I	2 Mi. S. of Isabella to Isabella	2.0	3/11/48	Munn & Perkins & Mathew & Jorgenson	Grade, B.S.T. & Bridge	147,089	20,068	167,157
0-14VC63	Kern	57	K	Canebrake Creek		8/18/48	Bishop Engr. & Const. Co.	Bridge & Approaches	15,633	3,771	19,404
1-9VC26	Kern	57	K	Bet. Chimney Creek & Walker Pass		10/ 4/49	Miles & Bailey	Grade & Surface	46,386	9,200	*55,586
1-6VVC3-P	Kern	57, 58	Bkd	Intersection Baker & Summer Sta.		12/ 2/49	Westates Electrical Const. Co.	Signals	8,916	1,016	9,932
9VC5-F	Kern	58	A	Bet. 12 Mi. E. of Mojave & Muroc Jct.	5.0	1/28/47	Basich Bros. Const. Co. & Basich Bros.	Grade & Plant Mixed Surfacing	148,886	14,414	163,300
0-9VC15	Kern	58	A, B	Mojave to San Bernardino County Line	11.5	8/23/48	Oilfields Trucking Co. & Phoenix Const. Co.	Grade & Surface	149,695	17,245	166,940
0-9VC23	Kern	58	A, B	Mojave to SBD. Co. Line	11.5	6/25/49	G. & H. Paving Co.	Seal Coat	14,766	1,059	15,825
9VC8	Kern	58	B	Bet. Muroc Jct. & 6.5 Mi. E.	6.5	5/ 7/47	Basich Bros. Const. Co. & Basich Bros.	Repair with Road Mixed Surf.	31,114	1,907	33,021
14VC39	Kern	58	D	Across Walker Basin Cr. & Caliente Cr.		11/20/47	N. M. Saliba Co.	Redeck 3 Bridges	26,720	2,408	29,128

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
6XC11-F	Kern	58	E, F, Thpi	Bet. Keene & Tehachapi	10.2	12/31/46	Guy F. Atkinson Co.	Grade, Surface & Bridges	\$1,142,467	\$89,173	\$1,231,639
14XC23-F	Kern	58	E, F	Between Keene & Tehachapi	---	8/15/47	Guy F. Atkinson Co.	2 Bridge Superstructures	396,645	17,248	413,893
0-6VC29	Kern	58	F	¼ Mi. E. of Tehachapi	0.2	9/ 8/48	Oilfields Trucking Co. & Phoenix Const. Co.	Culvert & Grade	17,353	2,472	19,825
6VC19	Kern	58	G	½ Mi. E. of Monolith	0.2	4/19/48	Oilfields Trucking Co. & Phoenix Const. Co.	Grade & Surface	18,698	3,000	21,698
14XC8	Kern	58	G	Across Cache Cr. & Los Angeles Aqueduct	---	12/11/45	E. W. Elliott Const. Co.	Plate Girder & R. C. Bridges	90,355	11,862	102,217
14VC40	Kern	58	K	Across Main Drainage Canal	---	12/11/47	E. G. Perham	Reinforced Concrete Bridge	22,452	4,186	26,638
1-14VC81	Kern	58	K	At Jerry Slough	---	4/ 1/49	W. E. Thomas Const. Co.	Const. Bridge & 2 Culverts	13,279	5,025	18,304
6XC16	Kern	58	L	On Oak St. at Bakersfield	---	6/30/47	Rexroth & Rexroth	Remove Girder Bridge	12,220	462	12,682
6XC9-F	Kern	129	A	Bet. Rte. 4 & 5 Mi. N.	5.1	10/14/46	Geo. E. France	Grade & Surface	159,598	26,848	186,446
14VC57	Kern	129	A	Poso Creek	---	6/15/48	F. Fredenburg	R.C. Bridge	47,378	3,437	50,815
0-6VC23	Ker, Tul.	129	AB, A	Poso Creek to Ducor	23.9	6/23/48	Clyde W. Wood, Inc.	Seal Coat	22,017	2,527	24,544
6XC10-F	Ker, Tul.	129	AB, A	Bet. Poso Cr. & Ducor	18.3	12/23/46	Rand Const. Co.	Grade & Surface	295,302	40,309	335,611
0-14VC62	Kern	139, 140	A, A	Kern River & Buena Vista Creek	---	8/ 3/48	Thomas Const. Co.	Const. culvert & Re-lock Bridge	26,491	4,397	30,888
0-6VC26	Kern	140	C	Derby St. to W. of Meyer St.	0.6	8/ 3/48	Griffith Co.	Bit. Surf. Treat.	35,494	3,868	39,362
1-6VC34	Kern	140	D	At Hill Creek	---	5/ 6/49	Anderson Co.	Cattle pass	5,400	1,190	6,590
1-6VMC2-P	Kern	141	Bkd	Intersection Brundage Lane & S. Chester Ave.	---	9/16/49	Westates Electrical Const. Co.	Lights & Signals	10,282	---	10,282
1-6VC32	Kern	142	A	Cow Creek	0.1	4/ 1/49	Thomas Const. Co.	Culvert & Approaches	8,296	1,717	10,013
1-6VVC2	Kern	142	A	Intersection Rte. 142 & Roberts Lane (Oldale)	---	7/27/49	Clinton Electric Corp.	Signals & Lighting	11,000	1,590	12,590
0-14VC61	Kern	142	B	Granite Canyon	---	7/17/48	Anderson Co.	Const. Bridge & Approaches	43,313	7,242	50,555
1-9VC25	Kern	145	A	Randsburg Road to Searles Sta. Road	2.3	8/ 2/49	Clyde C. Wood, Inc.	Grade & Surface	33,348	5,696	39,044
1-9VC18	Kern	212	A	Bet. Naval Ord. Sta. & Sbd. Co. Line	4.0	4/23/49	Rand Const. Co., Inc.	Surface	22,788	4,126	26,914

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14DC18	Kern	FAS 575		Across Kern River		5/28/47	O. B. Pierson	R.C. Slab Bridge	\$82,089	\$1,087	\$83,176
6DC2	Kern	FAS 884		On Comanche Dr., Bet. State Hwy. Rte. 38 & 3.3 Mi. S.	3.3	5/ 1/47	Rexroth & Rexroth	Grade & Surface	34,962	1,008	35,970
6DC15	Kern	FAS 887		Rte. 142 to Rte. 4	2.8	10/28/48	Griffith Co.	Grade & Surface	157,447	18,213	175,660
6DC14	Kern	FAS 889		Elmo Hwy. to Tulare County Line	7.2	9/24/48	Louis Biasotti & Son	Grade & Bit. Surf. Treat.	150,509	8,791	159,300
6DC4	Kern	FAS 889		Bet. Wasco & Elmo Hwy.	6.1	6/ 4/47	Rand Const. Co.	Grade & Surface	156,195	7,112	163,307
6DC10	Kern	FAS 895		Rte. 33 to Lerdo Hwy.	8.4	5/27/48	Geo. E. France, Inc.	Grade & Pen. Treat.	224,230	7,774	231,504
	Kern			Various Locations				Minor Contracts & D.L. Projects	89,761	948	90,709
1-6TTC1	Kings	10, 135	Han, A.	Jet. Rte. 10 & 135 at E.C.L. of Hanford		2/10/50	Westates Elec. Const. Co.	Signals & Lights	8,714	1,350	*10,064
1-6TC17	Kings	125	C	Kettleman City to 5th Standard Parallel	5.3	5/ 6/49	Gene Richards	Surface	92,337	31,299	123,636
0-6TC14	Kings	125	D	Stratford to 1 Mi. N.	1.9	7/27/48	Oilfields Trucking Co. & Phoenix Const. Co., Inc.	Grade, Surface & Const. Bridge	193,477	41,900	235,377
6WC4	Kings	125	D	Bet. Fifth Std. Parallel & 1.5 Mi. N.	1.5	1/21/46	W. C. Railing	Grading & Road Mix Surfacing	65,617	10,509	76,126
6DC13	Kings	FAS 568		Kings River to Fresno County Line	0.7	8/19/48	Anderson Co.	Surfacing	40,526	809	41,335
14DC12	Kin, Fre	FAS 623		Across Kings River near Hardwick		5/ 1/47	Klay Bennett Const. Co.	R.C. Bridge	129,033	1,980	131,013
6DC7	Kings	FAS 943		Bet. Corcoran & 5.3 Mi. S.	5.3	11/13/47	C. M. Syar	Grade, C.R.B. & P.M.S.	137,055	5,457	142,512
	Kings			Various Locations				Minor Contracts & D.L. Projects	23,050	485	23,535
0-14TC43	Lake	15	B	2.6 Mi. E. of Upper Lake		5/27/48	C. C. Gildersleeve	Cattlepass	5,880	734	6,614

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
1WLC6	Lak. Nap.	49	A, A	See Napa County							
1-1TC32	Lake	49	B	1.3 to 5.9 Mi. N. of Putah Creek	1.4	4/ 1/49	Chittenden & Chittenden	Grade, Surface & Seal Coat	\$131,965	\$20,158	\$152,123
0-1TC21	Lake	49	B	At Coyote Cr. about 6 Mi. N. of Middletown	0.5	3/ 2/48	Harold Smith	Const. Bridge & Approaches	63,385	10,763	74,148
14TC41	Lake	49	C	Across Burns Valley Creek		4/21/48	C. C. Gildensleeve	Repair Bridge	4,893	787	5,680
1W28	Lake	49	C	At Burns Valley & Molesworth Creeks		9/19/46	Day Labor	Replace Bridges	7,871	38	7,909
14WLC49	Lake	89	B, C	At Kelsey Cr. at Cobb		4/24/47	Arthur B. Stry	Bridge & Approaches	33,838	4,454	38,292
1T64	Lake	89	B, C, D	Middletown to Kelsey		7/ 1/48	Day Labor	Grade & Surface	52,610	8,750	*61,360
14WLC36-F	Lake	89	D	Across Kelsey Cr. at Kelseyville		7/19/46	A. Soda & Son	Bridge & Approaches	210,083	16,986	227,069
1WC10	Lake	89	E	Bet. 1.2 Mi. N. of Rodman Narrows & Rte. 15	2.0	3/26/46	Louis Biasotti & Son	Grading & Plant Mixed Surfacing	155,489	23,540	179,029
14WLC30-F	Lake	89	E	Across Robinson Cr. & Scott Cr.		5/ 7/46	Kiss Crane Co.	Two Bridges	144,290	14,687	158,977
1W30	Lake	89	E	N. of Redman Narrows Rd. to Rte. 15	2.0	2/20/47	Day Labor	Seal Coat	4,654		4,654
1DC5	Lake	FAS 1039		Rte. 89 to 1 Mi. W. of Lower Lake	5.1	8/13/47	Morrison-Knudson Co.	Grade, Imported Borrow & Seal Coat	115,477	15,607	131,084
1DC6	Lake	FAS 1039		1.0 Mi. to 2.1 Mi. E. of Rte. 89	1.1	11/29/47	George Stout	Imported Borrow & Seal Coat	29,978	3,377	33,355
	Lake			Various Locations				Minor Contracts & D.L. Projects	14,997	600	15,597
2TC8	Las. Sha.	28	A, B, E	See Shasta County				Surfacing	12,391	76	12,467
2T46	Lassen	28	B	Bieber to Modoc County Line	3.2	6/ 3/47	Day Labor				
2TC20	Las. Plu.	29	A, A	See Plumas County							
0-2TC24	Lassen	29	B	Bet. Fredonyer Pass & Susan River	6.3	4/ 9/48	Sheldon Oil Co.	Base & P.M.S.	86,358	7,646	94,004
2WLC1	Lassen	29	C	At Baxter Creek, N. of Jonesville	1.1	8/21/47	Fredrickson & Watson Const. Co.	Grade, Surface, & Structure	101,747	9,629	111,376
2WC6	Lassen	29	D	Bet. 2 Mi. N. of Milford & Bird Flat	12.4	4/ 9/47	Clements & Co.	Plant Mixed Surfacing	130,162	12,387	142,549
2WC4	Lassen	29	D	Bet. 1.5 Mi. W. of Bird Flat & Doyle	7.5	1/17/46	The Utah Construction Co.	Grading & Plant Mixed Surfacing	237,117	26,413	263,530

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
2WC5	Lassen	73	B	Bet. Viewland & Secret Valley	13.8	4/16/46	E. B. Bishop	Gravel Base & Plant Mixed Surf.	\$122,258	\$9,615	\$131,873
2T74	Lassen	73	D	Litchfield to Ravendale	3.0	12/14/48	Day Labor	Grade & Surface	53,929		53,929
2W37	Lassen	73	E, F, G	Bet. Horse Lake Rd. & Modoc County Line	5.2	12/10/46	Day Labor	Resurfacing	31,934	560	32,494
2WC2	Las. Mod.	73, 28 210	Var	Bet. Horse Lake Rd. & Lakeview Jct. & Bet. Alturas & Stronghold	60	4/20/45	A. A. Tislaue & Son	Plant, Mixed Bit. Mtd. & Seal Coat	134,589	9,622	144,211
2DC7	Lassen	FAS 988		Susanville to northside Willow Cr. Valley	17.6	7/21/47	A. Teichert & Son, Inc.	Grade & R. M. S.	301,799	31,415	333,214
2DC9-P	Lassen, Modoc	FAS 988		Hayden Hill Rd. to Rte. 28	13.1	7/27/48	Harms Bros. & M. W. Brown	Grade & Seal Coat	902,450	12,037	914,487
	Lassen			Various Locations				Minor Contracts & D. L. Projects	5,331		5,331
0-7RVC1	Los Angeles	2	C	E. of Ventura County Line		12/28/48	Thomas Const. Co.	Cattlepass	10,645	1,221	11,866
0-7VC89	Los Angeles	2	C	Through Malibu Jct.	3.2	8/25/48	Peter Kiewit Sons' Co.	Grade, Surface & 3 Bridges	643,041	66,188	709,229
1-7VVC16	Los Angeles	2, 77 166, 174	D, Mtbl A, B	Various Locations		10/15/49	Westates Elec. Const. Co.	Signals & Lighting	21,290	1,950	23,240
7VC39	Los Angeles	2	D, Mtbl D, Wit	Goodrich Blvd. to Concourse Ave.		6/18/47	Econolite Corp.	Signals	32,370	1,321	33,691
7VC50	Los Angeles	2		Whittier Blvd. Painter Ave. Redman Ave.		11/26/47	Electric & Machinery Service, Inc.	Signals	31,621	1,210	32,831
7VC21	Los Angeles	2	L.A.	On & Adjacent to Santa Ana Parkway Bet. Soto St. & Indiana St.		7/15/46	Mike Radich & Co.	Grade & Construct Storm Drain & Sanitary Sewer	375,885	26,733	402,618
7VC24	Los Angeles	2	L.A.	Bet. Diamond St. & Sunset Blvd.		10/24/46	Chas. T. Brown	Storm Drain & Sanitary Sewer	185,885	11,873	197,758
14VC15	Los Angeles	2	L.A.	On Santa Ana Parkway at First St.		7/19/46	Haddock Co.	R.C. Undercrossing	175,255	7,260	182,515
7VC16	Los Angeles	2	L.A.	Kearney to Soto Sts.		1/14/46	Peter Kiewit Sons' Co.	P.C.C. & A.C.	1,376,339	118,769	1,495,108
14VC8	Los Angeles	2	L.A.	At Seventh St.		1/11/46	Byerts & Dunn	R.C. Overcrossing	247,667	23,096	270,763
14VC9	Los Angeles	2	L.A.	Santa Ana Pkwy, over Ramp 4 of Ramona Pkwy.		3/29/46	Contracting Engrs. Co.	Two Overhead Crossings	132,235	16,566	148,801
14VC10	Los Angeles	2	L.A.	At Benton Way		2/4/46	Byerts & Dunn	R.C. Overcrossing	147,552	21,901	169,453
14VC11	Los Angeles	2	L.A.	At Fourth St.		1/5/46	Byerts & Dunn	R.C. Overcrossing	130,354	14,573	144,927
14VC14	Los Angeles	2	L.A.	At Boyle Ave.		7/25/46	Peter Kiewit Sons' Co.	R.C. Overcrossing	202,616	13,460	216,076
14VC20	Los Angeles	2	L.A.	At Silver Lake Blvd.		11/14/46	Guy F. Atkinson Co.	R.C. Undercrossing	425,883	35,153	461,036

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14VC22	Los Angeles	2	L.A.	At Grand Ave.	---	12/ 9/46	Oberg Bros.	R.C. Crossing	\$239,009	\$19,991	\$259,000
14VC24	Los Angeles	2	L.A.	At Olympic Pkwy.	---	12/30/46	Haddock Co.	Overcrossing	300,528	19,360	319,888
14VC23	Los Angeles	2	L.A.	At Lorena St.	---	12/11/46	W. J. Diegel	R.C. Box Girder Overcrossing	140,261	11,307	151,568
14VC25	Los Angeles	2	L.A.	At Esperanza St. & Indiana St.	---	12/31/46	Haddock Co.	Overcrossing & Undercrossing	239,673	19,769	259,442
7VC28	Los Angeles	2	L.A.	Kearney to Soto Sts.	---	2/ 4/47	Jannoch Nurseries	Landscaping	55,033	6,088	62,021
14VC30	Los Angeles	2	L.A.	At Euclid Ave. & Marietta St.	---	4/20/47	Spencer Webb Co.	2 R.C. Box Girder Undercross	254,498	18,991	273,489
14VC27	Los Angeles	2	L.A.	Soto St. Underpass	---	3/ 6/47	Oberg Bros.	R.C. Underpass	181,109	13,679	194,788
7VC37	Los Angeles	2	L.A.	Also—Kearney Sts.	---	5/13/47	Vido Kovacevich	Grade P.C.C. & A.C.	185,116	20,670	205,786
7VC44	Los Angeles	2	L.A.	Also St. to Kearney St.	---	7/11/47	Jannoch Nurseries	Landscaping	9,030	11,066	20,096
14VC53-F	Los Angeles	2	L.A.	Vendome St. & Coronado St.	---	4/26/48	Chas. MacClosky Co.	2 Undercrossings	320,169	26,125	346,294
7VC82	Los Angeles	2	L.A.	Vineland Ave. to Barham Blvd.	---	6/29/48	Tri-Cities Elec. Serv.	Lighting	39,668	1,528	41,196
14VC37-F	Los Angeles	2	L.A.	Hollywood Pkwy. at Alvarado St.	---	10/20/48	Guy F. Atkinson Co.	Undercrossing	339,108	23,543	362,651
14VC44-F	Los Angeles	2	L.A.	Virgil Ave., Hoover St. & Rosemont Ave.	---	1/20/48	Spencer Webb Co.	2 Undercrossings & 1 Overcrossing	556,267	40,307	606,574
7VC35-FP	Los Angeles	2	L.A.	Vineland Ave. to Barham Blvd.	1.8	5/28/47	Peter Kiewit Sons' Co.	Grade, Pave & Structure	1,707,402	140,000	*1,847,402
7VC73	Los Angeles	2	L.A.	E. Edgeware Rd. to 0.5 Mi. Easterly	0.05	4/22/48	McClain Const. Co.	Grade & Pave	14,805	2,083	16,888
0-7VC108	Los Angeles	2	L.A.	Boston St. Extension	---	4/14/49	Drachine Rental Co.	Grade & Surface	15,467	2,037	17,496
0-14VC54-F	Los Angeles	2	L.A.	Bonnie Brae St. & Beaudry Ave.	0.1	5/14/48	J. E. Haddock, Ltd.	2 Grade Separation Structures	416,214	30,928	447,142
0-14VC64	Los Angeles	2	L.A.	On Hollywood Parkway at Spring Street	---	8/23/48	Oberg Bros. Const. Co.	Overcrossing	237,908	12,717	250,625
1-7VC132	Los Angeles	2	L.A.	Glendale Blvd.	---	10/11/49	Electric & Machinery Service, Inc.	Illuminated signs	3,709	554	*4,264
0-14VC65	Los Angeles	2	L.A.	Melrose & Vermont Aves.	---	9/ 2/48	Spencer Webb Co.	Overcrossing & Undercrossing	948,005	51,000	*999,005
0-14VC75	Los Angeles	2	L.A.	Santa Monica Blvd. & Normandie Ave.	---	11/16/48	J. E. Haddock, Ltd.	2 Overcrossings & Approaches	574,535	43,930	618,465
0-14VC76	Los Angeles	2	L.A.	Western Avenue	---	12/15/48	Oberg Bros. Constr. Co.	Overcrossing	656,765	51,000	*707,765
0-14VC80	Los Angeles	2	L.A.	E. Edgeware Road	---	3/ 1/49	J. E. Haddock, Ltd.	Overcrossing	110,820	14,522	125,342
0-14VC77	Los Angeles	2	L.A.	Glendale Blvd.	---	1/ 3/49	J. E. Haddock, Ltd.	2 Undercrossings & Approaches	463,161	34,391	497,552
0-14VC79	Los Angeles	2	L.A.	Heliotrope Drive	---	2/17/49	Chas. MacClosky Co.	Undercrossing	490,894	30,658	521,552
0-7VC107	Los Angeles	2	L.A.	Normandie Ave. to Alexandria Ave.	0.2	4/ 8/49	McClain Const. Co.	Outer Highways	28,337	4,083	32,420
0-7VC108	Los Angeles	2	L.A.	Boston St. Extension	0.1	4/14/49	Drachine Rentals Co.	Grade & Surface	15,467	2,039	17,505
14VC49-F	Los Angeles	2	L.A.	On Hollywood Parkway at Figueroa St.	---	2/27/48	Carlo Bongiovanni	4 Undercrossings & 2 ramp separations	998,628	60,882	1,059,510
0-7VC95	Los Angeles	2	L.A.	Vineland Ave. to Barham Blvd.	1.8	11/19/48	Henry C. Soto Corp.	Landscaping	25,440	3,036	*28,476
14VC32	Los Angeles	2, 165	L.A.	Hollywood Parkway & Arroyo-Seco Harbor Freeway	---	6/24/47	James I. Barnes Const. Co.	4 Level Structures	1,038,591	175,065	1,213,656

COMPLETED CONTRACTS—June 30 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
7VC49-F	Los Angeles	2	L A, C	Calabasas to 1.5 Mi. Westerly	2.2	11/17/47	Spicer Co.	Grade & Surface	\$325,839	\$38,808	\$364,645
7VC39-F	Los Angeles	2	L A, D	Soto St. to Eastman Ave.	2.0	2/13/48	Griffith Co.	Grade & Pave.	1,062,852	80,061	1,142,913
0-7VC31	Los Angeles	2	L A, D	Also St. to Eastman Ave.	3	9/27/48	Elec. & Mech. Serv., Inc.	Lighting	116,968	3,805	120,773
0-7VC142	Los Angeles	2	L A, D	Also St. to Eastman Ave.	3	1/1/49	Day Labor	Signs & Lights	6,018	---	6,018
0-7VC39	Los Angeles	2	L A, D	Soto Street to Eastman Ave.	1.98	1/7/49	Huttig & Schromm	Landscape	46,764	4,270	*51,034
7VC47	Los Angeles	2, 168	D, C	Various Locations	---	10/24/47	Econolite Corp.	Traffic Sig. & Lighting	58,390	1,486	59,876
7VC81	Los Angeles	4	F	Pico Canyon Rd. to Rte. 79	---	6/24/48	N. M. Ball Sons	Grade & Pave.	428,654	50,570	479,224
0-7VC87	Los Angeles	4	F, A	Saugus Rd. & Ventura Rd.	3.3	8/11/48	California Elec. Works	Signals & Lighting	33,343	2,210	35,553
0-7VC78	Los Angeles	4, 79	F, A, B, A	S. of Santa Clara River to Castaic Cr.	2.6	6/10/48	Griffith Co.	Grade & Pave.	456,107	50,000	*536,107
7VC31	Los Angeles	4	G	Palomas Cr.—Violin Saddle	2.6	3/10/47	Clyde W. Wood, Inc.	Grade & P.M.S.	798,702	74,581	873,283
7VC57	Los Angeles	4	G, H	Violin Saddle to Whitaker Summit	4.4	2/6/48	Winston Bros. Co.	Grade & Surface	1,375,168	98,915	1,474,083
7VC38	Los Angeles	4	H	9 Mi. N. of Castaic to Frenchman's Flat	3.8	5/29/47	Winston Bros. Co.	Grade & Surface	1,455,481	126,678	1,582,159
0-7VC109	Los Angeles	4	J	N. of Los Alamos Creek to S. of Rte. 59	6.7	4/14/49	Peter Kiewit Sons' Co.	Grade & Pave.	968,921	100,000	*1,068,921
7V45	Los Angeles	4	Brb	Magnolia Ave. to Providencia Ave.	---	7/10/46	Day Labor	Traffic Signal	13,675	---	13,675
7AVC2	Los Angeles	4	Brb	Bet. Burbank Blvd. & Orange Grove Ave.	0.5	10/30/45	Jesse S. Smith	Grading & A.C. Paving	89,179	13,950	103,129
1-7VVC12	Los Angeles	4	Brb	Rte. 4 at San Fernando Blvd. & Burbank Blvd.	---	8/6/49	C. D. Draucker, Inc.	Lights & Signals	24,663	2,754	*27,417
1-7VVC125	Los Angeles	4	Brb	San Fernando Blvd. to Burbank Blvd.	0.8	6/9/49	Griffith Co.	Grade & Pave.	199,791	23,031	*222,822
0-7VVC1	Los Angeles	9	A, B	On Foothill Blvd.	---	7/23/48	C. D. Draucker, Inc.	Signals & Channelization	70,334	3,736	74,070
7VV11	Los Angeles	9	A, B	On Foothill Blvd.	---	7/12/48	Day Labor	Signals & Channelization	6,057	---	6,057
14VC33	Los Angeles	9	G	Across San Gabriel River near Azusa	---	6/26/47	Bonadiman-McCain, Inc.	Reconstruct Bridge	44,184	6,118	50,302
7VC34	Los Angeles	9	H	Bet. Citrus Ave. & Grand Ave.	1.0	4/29/47	Griffith Company	Surfacing	7,873	646	8,519
0-7VVC5	Los Angeles	9	J, Ada, Munro	Various Locations on Foothill Blvd.	---	10/6/48	C. D. Draucker, Inc.	Signals & Lighting	36,405	1,896	38,301
0-7VVC11-P	Los Angeles	9	Cla	Foothill Blvd. at Indian Hill Blvd.	---	6/28/49	Paul R. Gardner	Signals & Lighting	9,873	1,153	11,026
7VC53-P	Los Angeles	9	Munro, G H, Gdr	5th Ave. to Glendora Ave.	---	1/17/48	Econolite Corp.	Signals & Lighting	82,490	1,472	83,962
1-7VVC13	Los Angeles	9	SFr	Mackay at 7th St.	---	9/21/49	C. D. Draucker, Inc.	Signals	2,055	347	2,402

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
7XC22	Los Angeles	19	B, Pom	Bet. Rte. 77 & Pomona	0.7	10/17/46	Matich Bros.	Grade & Widen with P.C.C.	\$72,373	\$9,414	\$81,787
0-7VC88	Los Angeles	19	Pom	White Ave. to Garey	0.5	8/11/48	Cox Bros. Const. Co.	Surfacing	39,191	1,973	41,164
7V146	Los Angeles	23, 79	C,D,E,B	Williams Ranch to Palmdale & Jct. Rte. 23 to Saugus	10.7	7/ 1/49	Day Labor	Shoulders	55,134	1,548	56,682
7VC26	Los Angeles	23	E, F	About 0.5 Mi. N. of Palmdale	0.8	12/30/46	A. A. Edmondson	Grade & Surface	60,829	280	61,109
1-7VVC19	Los Angeles	23	F	Intersection Sierra Highway & 10th St.	---	3/13/50	Electric & Machinery Service, Inc.	Signals	5,100	600	*5,700
0-7VC74	Los Angeles	23	G	Lancaster to Kern County Line	8.1	4/22/48	G. W. Ellis Const. Co.	Resurfacing	96,679	8,835	105,514
0-7VC68	Los Angeles	23	I	Rte. 79 to ½ Mi. S. of Santa Clara River	4.0	4/ 1/48	Schroeder & Co.	Grade & P.M.S.	74,137	5,392	79,529
0-7VC72	Los Angeles	26	A, EMte	New Ave. to Mountain View Ave.	3.9	4/15/48	Wm. Radkavich Co., Inc.	Grade & Surface	108,790	7,986	116,776
0-7VVC9-P	Los Angeles	26, 172	A, Mon P, Mtbl	Intersections of Garvey Ave. & Denton Ave. & 3d St. & Garfield	---	4/27/49	Prescott Elect. & Mfg. Co.	Signals & Lighting	13,132	1,124	*14,256
7XC36	Los Angeles	26	A, B EMte	San Gabriel Blvd.—Mt. View Rd.	---	6/ 6/47	C. D. Draucker Co.	Signals	55,781	5,600	*61,381
0-7VVC2	Los Angeles	26	B, WCov	Bet. Frazier St. & Barranca St.	---	7/29/48	Paul Gardner	Signals	76,685	3,221	79,906
7XC38	Los Angeles	26, 77	C, B	At Holt Ave. & Bellevue Ave.	0.5	6/24/47	Griffith Company	Widen & Surface	74,341	7,400	*81,741
7XC37	Los Angeles	26, 77	C, B	At Holt Ave. & Bellevue Ave.	---	6/24/47	Econolite Corp.	Signals & Lighting	30,941	3,000	*33,941
7VMC23	Los Angeles	26	Alh	Ramona Blvd. & Garvey Ave.	---	3/22/48	Econolite Corp.	Signals	14,083	---	14,083
7VC58	Los Angeles	26	L.A.	Macy St. to Indiana St.	1.8	2/13/48	Jannoch Nurseries	Landscaping	40,944	2,691	43,635
7XC16	Los Angeles	26	L.A.	Bet. Macy St. & Indiana St.	1.9	4/26/46	Alcorn Fence Co.	Fence	26,927	1,843	28,773
7XMC4	Los Angeles	26	Mon P, A	Various Locations	---	12/11/46	C. D. Draucker Co.	Traffic Signal	42,189	686	42,875
7V102	Los Angeles	59	D	Sandy Creek	---	2/ 2/48	Day Labor	R.C. Box Culvert	5,941	139	6,080
14VC45	Los Angeles	59	H	At Big Rock Wash.	---	1/23/48	Troy Const. Inc.	2 R.C. Bridges	39,204	4,384	43,588

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
7VC23	Los Angeles	60	A	Latigo Canyon to Malibu Cr.	4.5	10/14/46	Peter Kiewit Sons' Co.	Grade & Pave.	1,633,924	\$143,893	1,777,817
0-7VC92	Los Angeles	60	A	Malibu Cr. to Las Flores Cr.	2.9	10/11/48	Dico, Inc., & Dix-Syl	Grade & Surface	483,651	52,068	535,719
0-7VC97	Los Angeles	60	A	Solstice Canal to Malibu Cr.	3.3	1/ 4/49	Const. Co., Inc.	Landscape	1,394	1,394	11,210
7V86	Los Angeles	60	B	Various Locations	---	1/17/47	Day Labor	Reconst. Culvert.	16,261	816	17,077
7VC3	Los Angeles	60, 158	C, B	0.4 Mi. North of L.A. County Line	---	3/ 5/48	Econolite Corp.	Signals	49,455	747	50,402
7V41	Los Angeles	60	E Seg., Man B	In El Segundo at El Segundo Blvd. & in Manhattan Beach at Rosecrans Blvd.	---	5/20/46	Day Labor	Widen & Channelize	3,768	128	3,896
7VC22	Los Angeles	60, 166	E Seg., Man B, A	At Intersections of Rte. 60 with El Segundo Blvd. & Rosecrans Ave. & at Intersection of Rte. 166 with Wash- ington Blvd.	---	7/19/46	Econolite Corp.	Traffic Signal Systems	24,705	1,796	26,501
7VV65	Los Angeles	60, 179	LBch	Pacific Coast Highway & 7th St.	---	2/23/49	Day Labor	Signals	5,542	---	5,542
7AVC3	Los Angeles	60	LA, G LBch	Dominquez Channel—S. Gabriel Ave.	0.7	4/25/46	James I. Barnes Const. Co.	Grade, Pave, & Bridges	1,996,111	195,000	*2,191,111
51-7VC9	Los Angeles	60	L.A.	A.T.S.F. Overhead to Figueroa St.	1.5	5/11/50	Griffith Company	Surface	17,680	---	*17,680
1-7VC131	Los Angeles	60	L.A.	Washington Blvd. to Venice Blvd.	0.4	9/15/49	Jesse S. Smith & A. A. Edmonson	Widen & Resurface	78,305	10,273	*88,578
7V147	Los Angeles	60	L.A.	Alameda St. to W. City Limit (portion)	1.2	7/ 1/49	Day Labor	Surface & Shoulders	49,647	---	49,647
0-7VMC28-P	Los Angeles	60	Man B	At Marine Ave.	---	7/17/48	Econolite Corp.	Signals	11,609	---	11,609
7VMC11	Los Angeles	60	Rdo B, Hm B	Redondo & Hermosa Beach	---	3/ 7/47	C. D. Draucker Co.	Signals	44,274	1,545	45,819
7VC80	Los Angeles	60	SMca	Colorado St. Tunnel to Lincoln Blvd.	0.6	6/18/48	J. E. Haddock, Ltd.	Base & Surfacing	79,397	7,780	87,176
0-7VVC10	Los Angeles	60, 158	SMca, A	Palisades Beach Rd. at California Ave. & Sepulveda Blvd. at Constitution Ave.	---	5/ 6/49	Westates Elec. Const. Co.	Signals & Lighting	14,593	902	15,495
7VMC9	Los Angeles	60, 175	Man B, Hm B	At Center St. & Gould Lane	---	2/17/47	Econolite Corp.	Traffic Signals	25,913	---	25,913

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
7V134	Los Angeles	61	C, D	Angeles Crest Highway	8.3	7/ 1/48	Prison Labor	Grading	\$348,945	\$57,329	\$406,274
47X1	Los Angeles	61	C, D	Chilao to W. Islip Saddle	3.1	6/21/41	Prison Labor	Grading	1,016,529	35,500	1,052,029
7V148	Los Angeles	61	C, D	Angeles Crest Highway	---	7/ 1/49	Prison Labor	Grading	423,000	31,614	454,614
7V122	Los Angeles	62	B	N. Fork San Gabriel River	---	5/ 5/48	Day Labor	Replace Bridge	12,091	564	12,655
1-7VVC20	Los Angeles	77	A	Valley View Blvd. at Mountain View Rd.	---	3/14/50	Elec. & Mach. Service, Inc.	Signals	2,067	400	2,467
7V139	Los Angeles	77	A, Emte	San Bernardino Rd. to Rte. 26	---	12/14/48	Day Labor	Improve Drainage	13,895	---	13,895
7XMC2	Los Angeles	77	Alh, SGB	Various Locations	---	11/12/46	C. D. Draucker Co.	Signal System	57,226	---	57,226
0-7VC104	Los Angeles	77	Emte, A	San Bernardino Rd. to Garvey Ave.	---	1/20/49	Prescott Elec. & Mfg. Co.	Signals & Lights	14,924	2,100	*17,024
0-7VC101	Los Angeles	77	Emte, A	San Bernardino Rd. to Rte. 26	1.1	1/12/49	M. S. Mechem & Sons & Boddum & Peterson	Plant Mix Surfacing	187,093	23,098	210,191
7VC65	Los Angeles	77	SGB, A EMte	San Gabriel Blvd. to Hoyt Ave.	---	3/17/48	Elec. & Mach. Serv. Inc.	Signals	35,338	2,100	37,438
0-7VC66	Los Angeles	79	B	Bet. Saugus & Rte. 4	2.3	4/ 1/48	Smith-Edmondson Co.	Grade & P.M.S.	28,856	2,827	31,683
7V145	Los Angeles	155	A	Decker Canyon Rd.	4.2	6/ 9/49	Day Labor	B.S.T. & Extend Culverts	13,895	---	13,895
7V112	Los Angeles	158	B	Centinella Ave. at Slauson & Jefferson Blvd.	---	2/26/48	Day Labor	Signals & Channelization	5,784	---	5,784
1-7VC112	Los Angeles	158	B, L.A.	Playa St. to E.C.L. of Culver City	1.0	4/21/49	J. E. Haddock Ltd.	Widen & Resurf.	71,149	6,637	77,786
7X62	Los Angeles	161, 168	A, C	Colorado St. at Rosemead Blvd.	---	7/30/46	Day Labor	Widen Pav't & Const. Div. Strip.	6,189	509	6,698
7XC25	Los Angeles	161, 168, 9, 62	A, C, Azu	At Various Locations	---	11/26/46	Econolite Corporation	Signal System Illumination	36,335	1,776	38,111
7VC40	Los Angeles	161, 9	Ada Muro, G	In the Cities of Arcadia & Monrovia	---	6/30/47	Elect. & Mach. Serv. Inc.	Signals	39,020	200	*39,220
7VVI02	Los Angeles	161	Brb.	Various Locations	---	7/21/49	Day Labor	Signals & Channelization	5,579	---	5,579
1-7VC117	Los Angeles	161	Brb.	W. City Limits of Burbank to Victory Blvd.	2.6	5/26/49	Schroeder & Co.	Resurface	64,869	3,999	68,868
7XC33	Los Angeles	162	A	Doheny Dr.—La Brea Ave.	---	5/ 9/47	C. D. Draucker Co.	Signals	67,742	6,375	*74,117

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
7X100	Los Angeles	164	A	Mi. 1.05 Ely from Sepulveda Blvd.	---	10/ 2/ 47	Day Labor	C.M.P. Culvert	\$6,080	\$169	\$6,249
7VC80	Los Angeles	164	A, Haw	Redondo Beach to Century Blvd.	---	2/ 20/ 48	C. D. Draucker, Inc.	Signals	81,325	3,433	84,758
0-7VVC4	Los Angeles	164	A, Haw	16th St. to 132d St.	---	9/17/ 48	Econolite Corp.	Signals	28,201	1,558	29,759
51-7VC3	Los Angeles	164	A	Imperial Highway to Century Blvd.	1.1	4/ 1/ 50	Oswald Bros. Co.	Surface	28,086	6,000	*34,086
0-7VVC6	Los Angeles	164	Ing	On La Brea Ave.	---	1/ 4/ 49	Elec. & Mach. Serv. Inc.	Signals	19,123	2,186	21,309
7VC46	Los Angeles	165, 167, 174	A, A SGT	Figuerroa St. & Carson St., Atlantic Ave. & Rosecrans Ave. & Firestone Blvd. & Garfield Ave.	---	10/ 2/ 47	Econolite Corp.	Signals	34,783	515	35,298
7XC21	Los Angeles	165	L.A.	Bet. College St. & Bernard St.	0.3	8/16/ 46	J. E. Haddock, Ltd.	Grading & Paving	286,824	23,721	310,545
7XC30	Los Angeles	165	L.A.	College St. to Bernard St.	0.3	3/ 27/ 47	Jannoch Nurseries	Landscaping	17,615	2,404	20,019
14XC19	Los Angeles	165	L.A.	At Sunset Blvd.	---	1/ 28/ 47	Winston Bros. Co.	R.C. Crossing	487,640	34,000	*521,640
7XMC13	Los Angeles	165	L.A.	Bernard St. to Ave. 22	---	9/ 22/ 47	Huetting & Schromm	Landscaping	19,599	---	19,599
7XMC12	Los Angeles	165	L.A.	Bernard St. to Ave. 22	1.3	7/ 23/ 47	J. E. Haddock, Ltd.	Grade P.M.S. & P.C.C.	281,920	---	281,920
7V137	Los Angeles	165	L.A.	7th St. to Wilshire Blvd.	---	11/17/ 48	Day Labor	Open Street Connection	120,000	---	120,000
14VC55F	Los Angeles	165	L.A.	Arroyo Seco Parkway to Alpine St.	---	5/14/ 48	G. W. Peterson	Overcrossing	106,353	9,385	115,738
14VC47F	Los Angeles	165	L.A.	Harbor Parkway at Temple St.	---	10/14/ 47	James I. Barnes Const. Co.	Undercrossing	353,101	27,925	381,026
51-7VC1	Los Angeles	165	L.A.	Marmion Way to Ave. 50 on Figueroa	1.1	4/ 1/ 50	C. O. Sparks, Inc., & Mundo Engr. Co.	Surface	14,960	2,500	*17,460
0-7VC102	Los Angeles	165	L.A.	Arroyo Seco Parkway	0.2	1/12/ 49	Jesse S. Smith	Grade & Pave	101,864	12,316	*114,180
7XC55	Los Angeles	166	A	At Washington Blvd.	---	4/13/ 46	Day Labor	Widen Pavement, Construct Curbs & Paint Stripes	5,471	28	5,499
1-7VC140	Los Angeles	166	A	On Anaheim-Telegraph Road	1.5	12/15/ 49	Griffith Co.	Grade & Surface	55,625	9,000	*64,625
1-7VC150	Los Angeles	166	A	Anaheim-Telegraph Road at Slauson	---	4/ 4/ 50	Electric & Machinery Service, Inc.	Signals & Lighting	6,263	650	*6,913
7V154	Los Angeles	166	A	La Verne Avenue to Eastland	0.9	1/12/ 50	Day Labor	Signals, Stripes & Markings	7,319	---	7,319
0-14VC67	Los Angeles	166	A	La Verne Avenue to Eastland	0.9	9/15/ 48	Griffith Co.	Grade, Pave & Structures	1,386,461	112,000	*1,498,461
0-7VC106	Los Angeles	166, 167	A, A	On Santa Ana Parkway	---	2/ 3/ 49	Econolite Corporation	Signals & Lighting	95,499	5,000	*100,499
7VC54	Los Angeles	167	A, Lyn	At Atlantic Ave.	---	1/21/ 48	C. D. Draucker Co.	Signals	12,274	395	12,669
7VC62	Los Angeles	167	A	Jardine & Everington Sts.	---	2/20/ 48	Econolite Corp.	Signals	12,811	794	13,605

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
7VV42	Los Angeles	167	LBch	Various Locations		12/ 7/48	Day Labor	Signals	\$3,757		\$3,757
1-7VC122	Los Angeles	167	Lyn, SGT	South City Limits to Patata St.	1.7	6/ 7/49	C. O. Sparks, Inc., & Mundo Eng. Co.	Resurface	45,256	\$4,800	*50,056
7V144	Los Angeles	167	Lyn, SGT	Lynwood to South Gate	2.9	5/ 2/49	Day Labor	Day Labor	6,379		6,379
7XMC8	Los Angeles	167	Lyn, SGT	In the Cities of Lynwood & South Gate		6/26/47	Econolite Corp.	Signals	31,156		31,156
1-7VC114	Los Angeles	167	SGT	At Patata St.		5/ 6/49	Vido Kovacevich Co.	Drainage	14,458	1,629	16,087
7XC28	Los Angeles	167	Var.	Various Locations		1/22/47	R. E. Ziebarth	Signal Systems	52,506	1,101	53,607
7XC35	Los Angeles	168	A	On Lakewood Blvd., bet. Spring St. & Conant St.		5/20/47	Jesse S. Smith	Reconstruct & Surface Shldr.	29,625	1,471	31,096
0-7VC94	Los Angeles	168	A, B	Bellflower Blvd. to Beverly Blvd.	5.9	11/19/48	Vido Kovacevich & Vido Kovacevich Co.	Grade & Surface	571,155	63,000	*634,155
0-7VC98	Los Angeles	168	A, B	Firestone Blvd. to Whittier Blvd.		12/23/48	Econolite Corp.	Signals & Lights	54,979	2,655	57,634
7V140	Los Angeles	168	A, B	Rosemead Blvd.	5.9	12/30/48	Day Labor	Signs & Stripes	4,977		4,977
7VC20	L.A., Ora	168, 60	B, SI, B	At Intersections of Rosemead & Whittier Bvds., East Hwy. with Main St. & with Bay Blvd.		6/24/46	Econolite Corp.	Traffic Signals	22,587	1,338	23,925
0-7VC115	Los Angeles	168	B, C	Bet. Beverly Blvd. & Garvey Ave.	4.3	5/12/49	J. E. Haddock, Ltd.	Grade & Surface	505,182	69,500	*574,682
0-7VC128	Los Angeles	168	B, C	On Rosemead Blvd. bet. Beverly Blvd. & Garvey Ave.		6/24/49	C. D. Draucker, Inc.	Signals & Lighting	43,086	4,000	*47,086
7XC15	Los Angeles	168	C	Rosemead Blvd., bet. Huntington Dr. & Colorado St.	1.1	3/28/46	Griffith Company	Grading & A.C. Paving	122,380	14,987	137,367
7XC32	Los Angeles	168	C	Rosemead Blvd. at Broadway		5/ 1/47	Prescott Elec. & Mfg. Co.	Signal System	8,938	529	9,467
7X66	Los Angeles	168	C	Colorado St. to Huntington Drive		2/ 6/48	Day Labor	Landscaping	2,107	279	2,386
0-7VC90	Los Angeles	168	C	At Longden Ave. & Duarte Road		9/13/48	Econolite Corp.	Signals & Lighting	19,412	554	19,966
0-7VC86	Los Angeles	168	C	Longden Ave. to Huntington Drive	1.2	8/ 5/48	Vido Kovacevich Co.	Surfacing	64,333	7,746	72,079
0-7VVC7	Los Angeles	170	A	On Norwalk Blvd.		1/ 7/49	Tri-Cities Elec. Serv., Inc.	Signals & Lighting	18,192	1,500	*19,692
0-7VC70	Los Angeles	170	A	Norwalk Blvd. to Orangefhorpe Ave.	1.9	4/ 1/48	Sully-Miller Contr. Co.	Plant Mixed Surfacing	32,032	2,139	34,171
7XC64	Los Angeles	170, 174	A, B	At Firestone Blvd. & San Antonio Dr.		8/ 9/46	Day Labor	Widen Pav't & Channelize	10,130	835	10,965

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
7XC20	Los Angeles	170	A	Bet. Sixth St. & 0.4 Mi. N. of Imperial Hwy.	1.0	7/26/46	Cox Bros. Const. Co.	Repair with P.M.S. & Widen Shldr.	\$16,741	\$1,648	\$18,389
7XC23	Los Angeles	170	A	Bet. Sproul St. & Anaheim-Telegraph Rd.	1.5	10/ 9/46	Griffith Company	Surfacing	22,686	2,731	25,417
1-7VVC17	Los Angeles	170	A	Pioneer Ave. at Orangethorpe Ave. & Norwalk Blvd. at Anaheim-Telegraph Rd.							
1-7VVC113	Los Angeles	170	A	Orangethorpe Ave. to Firestone Blvd.	3.4	10/15/49	Westates Electrical Const. Co.	Lights & Signals	18,513	2,000	*20,513
7V121	Los Angeles	170	Wit	Whittier Blvd. to Holbrook Ave.		4/21/49	John J. Swigert Co.	Plant Mix Surfacing	48,762	4,302	*53,064
7VC64	Los Angeles	173	A	Indiana St. to Anaheim-Telegraph Rd.		4/16/48	Day Labor	Widen & Pave	8,000		8,000
7VC79	Los Angeles	173	L.A., SMca	Lincoln Blvd. to Bundy Drive		2/27/48	Elec. & Mach. Serv., Inc.	Signals	23,125	686	23,811
7VC56P	Los Angeles	173	SMca	Lincoln Blvd. to Bundy Drive	2.3	6/10/48	C. D. Draucker	Signals	49,272	1,164	50,436
51-7VC8	Los Angeles	173	L.A.	Lincoln Blvd. to Bundy Drive	0.7	2/ 2/48	J. E. Haddock, Ltd.	Grade & Surface	854,398	93,000	*947,398
1-7VVC14	Los Angeles	173	SMca	Olympic Blvd., Lemon to Boyle		4/28/50	Griffith Co.	Surfacing	17,463	2,000	*19,463
1-7VC110	Los Angeles	174	B	On Olympic Blvd.		9/19/49	Electric & Machinery Service, Inc.	Lighting	8,983	900	*9,883
7XC29	Los Angeles	174	B	Manchester Ave. to Cadden Ave.	0.4	4/21/49	Griffith Co.	Surfacing	10,052	833	10,885
7XC31	L.A., Ora	174	B, A	Firestone Blvd., Bet. Hooper Ave. & Santa Fe Ave.		1/31/47	Prescott Elec. & Mfg. Co.	Traffic Signal Systems	30,406	1,137	31,543
51-7VC5	Los Angeles	174	B	On Firestone Blvd., Bet. Pioneer Blvd. & Lincoln Ave.	5.9	4/ 4/47	Jesse S. Smith	Resurface with P.M.S.	86,691	5,950	92,641
1-7VVC15	Los Angeles	174	Ing	Firestone Blvd., Central to Ivy	1.3	4/ 1/50	C. O. Sparks, Inc., & Mundo Engr. Co.	Surface	28,731	5,000	*33,731
0-7VC103	Los Angeles	174	Sgt B	On Manchester Blvd.		9/28/49	Electric & Machinery Service, Inc.	Signals	6,733	800	*7,533
0-7VC33	Los Angeles	174	Sgt B	Firestone Blvd.	0.6	1/12/49	O'Brien & Bell Const. Co.	Grade & Pave	147,370	16,000	*163,370
7X94	Los Angeles	178	A	L.A. River to Paramount Blvd.	1.9	10/22/48	Cox Bros. Const. Co.	Resurface	102,081	11,141	113,222
1-7VVC22	Los Angeles	178	A	Bet. Chermagne Ave. & Bellflower Blvd.		6/23/47	Day Labor	Storm Drain	6,000		6,000
1-14VC22	Los Angeles	178	A	Carson St. at Clark		4/26/50	Westates Electrical Const. Co.	Signals & Lighting	8,523	900	*9,423
				San Gabriel River	0.5	4/ 8/49	R. M. Price Co. & O. B. Pierson	Const. Bridge & Approach	296,308	31,640	327,948

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
0-7VC100	Los Angeles	205	L.A., SPas	On Arroyo Seco Parkway	3.2	1/ 7/49	Alcorn Fence Co.	Chain Link Fence	\$23,809	\$2,311	\$26,120
7V132	Los Angeles	205	L.A.	Arroyo Seco Parkway		6/26/49	Day Labor	Safety Devices	42,833	713	43,546
0-7VC105P	Los Angeles	205	Pos. SPas	At Fair Oaks Ave. & State St.		1/20/49	J. E. Haddock, Ltd.	Off-Ramp	23,607	3,345	26,952
0-7VC116	Los Angeles	205	SPas	Orange Grove Avenue & Fair Oaks Avenue		5/21/49	Electric & Machinery Service, Inc.	Lighting	6,044	589	6,633
14ASC4	Los Angeles	Access	L.A.	At Nicholson Ave.		6/ 3/46	Oberg Bros.	Overhead Crossing	267,405	39,865	*307,270
7ASC14	Los Angeles	Access	L.A., LHch	Term. Is. Freeway Bet. Henry Ford Ave. & Willow St.	2.1	4/18/46	Macco Const. Co.	Grade & Pave with A.C.	1,253,808	2,054	1,255,862
14ASC2	Los Angeles	Access	L.A.	Union Pacific R.R. Overhead		4/18/46	Macco Const. Co.	Overhead Str. Steel	585,129	34,885	*620,014
14ASC3	Los Angeles	Access	L.A.	Over Tracks of U.P., S.P. & P.E. at Anaheim.		4/18/46	E. W. Elliot Const. Co.	Struct. Steel Overhead Crossi-	852,809	47,016	*899,825
14DC35	Los Angeles	FAS 825		Across No. Fork of San Gabriel Riv.		4/ 9/48	Norman I. Fadel	Const. Steel Bridge	364,823	3,605	*368,428
14DC24	Los Angeles	FAS 830		Over Santa Clara River & S.P.R.R.		7/31/47	Bent Const. Co.	Steel Bridge	221,156	3,139	224,295
14DC22	Los Angeles	FAS 838		Across Los Angeles River at Florence Ave.	0.26	8/29/47	H. B. Nicholson	Bridge & Approaches	380,266	12,600	392,866
14DC49	Los Angeles	FAS 849		Santa Fe Dam Outlet		4/14/49	C. B. Tuttle Co.	Const. R.C. Bridge	64,829	510	65,339
0-7VVC3	Los Angeles	Var		At Various Locations		8/ 5/48	Tri-Cities Elect. Serv.	Signals & Lighting	45,215	2,835	48,050
7XC26	L.A., Ora.	Various		Various Locations		12/ 2/46	Econolite Corp.	Signal Systems	45,247	2,036	47,283
7VC52	L.A., Ora.	Various		Various Locations		12/18/47	Tri-Cities Elec. Serv.	Signal & Lights	29,633	1,290	30,923
	Los Angeles		A	Various Locations				Minor Contracts & D.L. Projects	187,610	1,290	188,900
6TC10F	Madera	4		San Joaquin River to Arcola School	7.1	1/15/48	Harns Bros.	Grade & Pave	974,094	74,565	1,048,659

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
6T4	Madera	4	B, C	Bet. 7.8 Mi. N. of Madera & Merced Co. Line		4/19/46	Day Labor	Restoring Oiled Borders	\$10,767	\$212	\$10,979
1-6TC16-F	Madera	4	B	N. of Dry Cr. to N. of Brenda	2.7	4/20/49	Guy F. Atkinson Co.	Grade, Surface & Const. R.C. Bridge	333,611	30,295	363,906
0-14TC44	Mad, Fre	4	C, A	See Fresno County							
14-DGTC1	Madera	126	B	A.T. & S.F.R.R. E. of Madera	0.6	3/26/48	Trewhitt-Shields & Fisher	Underpass & approaches	128,655	26,196	*154,851
14DC16	Mad, Fre	FAS 811		See Fresno County							
6DC12	Madera	FAS 864		Lincoln Rd. to State Rte. 32	5.5	7/28/48	Ted F. Baun	Grade & Surface	77,032	10,582	87,614
14DC11	Madera	FAS 962		Across Fine Gold Cr.	0.2	4/23/47	Dan Caputo	Steel Bridge & Approaches	74,573	6,327	80,900
6DC20	Madera	FAS 962		At Little Fine Gold Cr.	0.5	9/8/49	W. C. Lefever & D. Gerald Bing	Const. Bridge & Approaches	37,698	5,637	43,335
	Madera			Various Locations				Minor Contracts & D.L. Projects	11,908		11,908
4T34	Marin	1	A	At Ignacio Wye		6/5/46	Day Labor	Traffic Signals	8,265	431	8,696
4T34	Marin	1	A	At Grant Ave., in Novato		1/22/47	Day Labor	Install Signals & Lights	7,290	432	7,722
4TC21	Mtn, Son	1	A, C	See Sonoma County							
0-4TC51	Marin	1	A	1.6 Mi. N. of Novato to Ignacio	2.3	4/29/48	A. G. Raisch Co.	Resurfacing	67,931	6,894	74,825
1-4TC88	Marin	1	A, SRF, CMad, C	Ignacio to Richardson Bridge	4.3	7/12/49	A. G. Raisch Co.	Surface & Const. Outer Highway	247,903	32,000	*279,903
4TC60	Marin	1	C	At Greenbrae		6/23/48	Brown-Ely Co., Contrs.	Signals & Channelization	65,935	9,269	75,204
4TC33	Marin	1	C	Bet. San Rafael & Waldo	2.1	4/16/47	Lee J. Immel	Surfacing	70,744	4,832	75,576
4T120	Marin	1	C	At Greenbrae Intersection		10/4/49	Day Labor	Reconstruct Intersection	7,193		7,193
4T119	Marin	1	C	On Richardson Bay Br. No. 27-10		10/4/49	Day Labor	Repair Surface	10,721		10,721
0-4TTC3	Marin	1	CMad	Corte Madera Intersection	0.2	10/14/48	Baldwin, Staub Corp.	Signals & Lighting	25,817	5,765	31,582
4TC27	Marin	1	D, C, A	Bet. Waldo & Ignacio	1.5	6/28/46	Brown-Ely Co.	Repair with A.C. & Const. Shldrs	64,196	4,876	69,072
4T29	Marin	1	SRF, C	Bet. Sta. 97+90± & Sta. 42+50±		12/26/45	Day Labor	Guard Rail	5,034	8	5,042

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14TC18	Marin	1, Fd	Srf	At Linden Lane	---	2/13/47	Parish Bros. & Lew Jones Const. Co.	Grade Separations & Approaches	\$246,404	\$23,500	*\$269,904
14TC12	Marin	8	A	Across Novato Cr. about 9 Mi. N. of San Rafael	---	7/17/46	William B. Willett Co.	Repair Bridge	5,752	516	6,268
1-14TC58	Marin	8	A	Petaluma Cr.	---	4/ 1/49	Evans Const. Co.	Redeck Bridge	21,921	1,274	23,195
0-4TC96	Marin	8	A	Ignacio Wye to County Line	3.1	12/ 3/48	Parish Bros.	Grade & Surface	365,955	46,500	*412,455
1-4TC104	Marin	69	Srf, A	½ Mi. to 1 Mi. E. of San Quentin Wye	---	5/23/50	Carey Bros. Const. Co.	Const. Dike	11,484	1,500	12,984
4DC9	Marin	FAS 879	---	Point Reyes Sta. to 9 Mi. W. of Novato	9.9	4/22/48	A. G. Raisch Co.	Grade & Surface	216,669	15,410	232,079
---	Marin	---	---	Various Locations	---	---	---	Minor Contracts & D.L. Projects	27,280	---	27,280
10T72	Mariposa	110	B	Westerly Boundary to Coulterville	8.5	7/ 1/48	Day Labor	Grade & Surface	25,000	2,500	*27,500
14DC26	Mariposa	FAS 966, 963	---	17 Mi. W. of Mariposa to 12 Mi. E. of Mariposa	---	9/18/47	E. H. Peterson & Son	Constructing 6 Bridges	79,377	9,514	88,891
---	Mariposa	---	---	Various Locations	---	---	---	Minor Contracts & Day Labor Projects	4,945	---	4,945
1TC15	Mendocino	1	B	Bet. Burke Hill & 1 Mi. N.	1.0	6/21/46	C. M. Syar	Repair with Imp. Base Matl. & P.M.S.	38,385	4,128	42,513
1TC19	Mendocino	1	B	Bet. Hopland & Crawford Ranch	6.6	4/ 8/47	Clements & Co.	Plant Mix. Surf. & Seal Coat	199,023	14,376	173,399
0-1TC24	Mendocino	1	C, D	1.5 Mi. S. to 3.5 Mi. N. of Forsythe Cr.	5.2	4/14/48	Guy F. Atkinson Co.	Grade, Surface & Const. Bridge	924,843	111,673	1,036,516
1TC16	Mendocino	1	E	Bet. N.W.P.R.R. Grade Crossing & N.W. P.R.R. Underpass	0.8	10/14/46	A. R. McEwen & C. M. Syar	Grade & Surface	145,670	24,479	170,149
1TC10	Mendocino	1	E	Bet. N.W.P.R.R. Underpass & 1.1 Mi. S. of Willis	2.0	6/ 9/45	A. R. McEwen	Repair with Imp. Base & P.M. Bit Matl.	30,009	6,265	36,274
1TC14	Mendocino	1	E	Bet. Willis & 2.6 Mi. Northerly	2.6	5/10/46	C. M. Syar	Plant Mixed Surfacing	74,473	8,303	82,776
0-1TC22	Mendocino	1	H, I	2.8 Mi. S. to 1.0 Mi. N. of Rattlesnake Summit	3.8	4/ 1/48	C. M. Syar	Grade & Pavement	117,317	13,137	130,454
1T67	Mendocino	1	H	Station 385+20 to Station 398+70	0.256	3/ 3/49	Day Labor	Realignment	7,892	366	8,258
1-1TC36	Mendocino	1	H	Sherwood Rd. to Sapp Cr.	8.4	4/ 1/49	Clements & Co.	Plant Mix Surfacing	304,985	18,873	323,858

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
1TL8	Mendocino	1	I	Rattlesnake Cr.	---	9/18/47	Day Labor	Bridge Repairs	\$16,871	---	\$16,871
14TC35	Mendocino	1	J	At Rock Cr.	0.6	1/26/48	H. W. Ruby	Bridge & Approaches	174,688	\$14,782	189,470
1TC17F	Mendocino	1	K	Red Mountain Cr. to Piercy	4.6	10/31/46	Oilfield's Trucking Co. & Phoenix Const. Co.	Grade & Pave.	787,803	88,017	875,820
14TC27	Mendocino	1	K	At Red Mountain Cr. & McCoy Cr.	---	9/30/47	James H. McFarland	Repairing 2 Bridges	28,338	3,068	31,406
1TC38	Mendocino	1	K	At Red Mountain Cr.	---	5/ 9/47	Day Labor	Bridge Repairs	11,904	---	11,904
14TLC9	Mendocino	16	A	At Dooley Cr. 1 Mi. E. of Hopland	---	4/22/46	F. Fredenburg	R.C. Bridge & Approaches	41,367	4,547	45,914
1WLC5	Mendocino	48	A	At Red Bank Cr. & Lost Cr.	0.4	9/16/46	C. M. Syar	Grade & Imp. Base Matl.	31,336	5,410	36,746
1W24	Mendocino	48	B	At Anderson Cr. Br. No. 10-64	---	5/10/46	Day Labor	Repair Bridge	7,981	7	7,988
14TC29	Mendocino	48, 56	C, CD	Navarro River 4 Mi. S. of Albion	0.8	11/ 6/47	Johnston Rock Co.	Const. Bridge & Approach	330,685	50,517	381,202
1WLC4	Mendocino	56	A	At Slick Rock Cr.	1.0	5/16/46	Piombo Bros. & Co.	Grade & Imp. Base Matl.	118,949	17,029	135,978
0-1TC26	Mendocino	56	A	At St. Ores Cr. about 11.5 Mi. S. of Point Arena	0.5	5/ 5/48	Arthur B. Siri, Inc. & Baldwin-Straub Corp.	Grade, R.M.S. & Culverts	72,056	12,703	84,759
1WLC3	Mendocino	56	B	At Alder Cr. about 7 Mi. N. of Point Arena	1.2	9/24/45	Guerin Bros.	Grading, Surfacing & Bridge	198,762	30,140	228,902
1WC8	Mendocino	56	D	Bet. Navarro River & Mendocino	1.9	6/26/45	W. C. Railing	Repair with Imp. Base Matl. & Seal Coat	29,789	2,213	32,002
0-14TC65	Mendocino	56	D	Across Big River	---	5/ 5/49	Metzger Company	Repair Bridge	80,564	5,076	85,640
14WLC56F	Mendocino	56	E	Bet. Bromley Cr. & Fort Bragg	3.8	10/25/46	Guy F. Atkinson Co.	2 Bridges, Grade & P.M.S.	944,093	91,179	1,035,272
14WLC56F	Mendocino	56	E	Across Noyo River	---	6/27/47	J. H. Pomeroy & Co., Inc.	Bridge Superstructure	449,211	18,886	468,097
1WLC1	Mendocino	56	F	At Chadburn Cr., about 13.4 Mi. N. of Fort Bragg	0.2	7/ 6/45	John Burman & Sons	Grading, Culvert & Surfacing	19,313	3,476	22,789
1WLC2	Mendocino	56	F	At Blue Slide Gulch	0.2	8/28/45	John Burman & Sons	Grading, Surfacing & Bridge	70,324	11,516	81,840
1WLC7	Mendocino	56	F	At Kibbleshain Creek	0.3	6/27/47	Arthur B. Siri, Inc.	Grade & Surface	70,051	9,782	79,833
1TC28	Mendocino	56	F	At Virgin Creek	0.3	6/ 7/48	John Burman & Sons	Grade, Surface & Repair Bridge	56,364	8,685	65,049
1TMC1	Mendocino	56	FBg	S.C.L. of Fort Bragg to Oak St.	0.2	6/ 8/48	Arthur B. Siri, Inc.	Grade & Surface	16,837	---	16,837
1DC3	Mendocino	FAS 505	---	On Longvale-Covelo Rd., Bet. 1.5 Mi. & 5.4 Mi. Easterly of Dos Rios	2.9	3/26/47	N. M. Ball Sons	Grading	179,634	18,524	198,158

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14DC30	Mendocino	FAS 979		At Morrison Cr. S. of Ukiah		11/ 5/47	Kenneth Whited	Reinforced Concrete Bridge	\$13,544	\$534	\$14,078
1DC10	Mendocino	FAS 979		Rte. 1 & Rte. 70	10.4	4/ 1/49	Nevada Constructors, Inc.	Grade & Surface	176,932	18,979	195,911
1DC9	Mendocino	FAS 982		5.8 Mi. to 7.4 Mi. East of Noyo	1.6	8/ 5/48	A. G. Raisch Co. & Starving & Galbraith	Grade & Pen. Treat.	81,109	10,545	91,654
14DC36	Mendocino	FAS 982		Across Chamberlain Creek		5/25/48	Evans Const. Co.	R. C. Bridge	27,181	855	28,036
	Mendocino			Various Locations				Minor Contracts & D.L. Projects	49,093		49,093
10T25	Merced	4	A	0.4 Mi. S. of Merced		4/24/46	Day Labor	Improve Intersection	6,344	483	6,827
0-10TC31	Mer, Sta	4	A, C, A, B	Madera County Line to Salda		4/ 9/48	Louis Biasotti & Son	Barrier Posts	48,560	4,512	53,072
10TC11	Merced	4	C	Black Rascal Canal to Buhach Sta.	3.8	4/ 9/46	Gunner Corp.	Grade, Paye & Bridge	414,463	62,384	476,847
0-10TC38	Merced	4	C, D, Lvtm	Atwater to Livingston	5.7	9/ 8/48	Guy F. Atkinson Co.	Grade & Paye	598,029	61,500	*659,529
1-10TC44	Mer, Sta	4	D, A, Cer, B	Merced River to Delhi & Merced County Line to Hatch Crossing	10.9	4/ 1/49	M. J. Ruddy & Son	Surfacing	88,541	11,174	99,715
10TC19	Mer, Sta	4, 110	D, C	Bet. 3 Mi. N. of Livingston & Stanislaus County Line & Bet. Modesto & Empire	8.9	5/16/47	M. J. Ruddy & Son	Plant Mixed Surfacing	63,182	6,500	*69,682
10TC13	Merced	4	Atw, C	Bet. Atwater & 2 Mi. N.	3.2	5/27/47	Gunner Corp.	Repair with P.M.S.	64,642	5,336	69,978
0-10TC41	Merced	4	Lvtm	At Cressy Way		12/ 4/48	R. Goold & Son	Signals & Light	16,015	559	16,574
10TC28	Merced	4	Mer	On 16th St. in Merced		2/20/48	R. Goold & Son	Signals	6,123	426	6,549
10TC17	Merced	18	A	Bet. Planada & 5.3 Mi. E.	5.3	4/22/47	M. J. Ruddy & Son	Plant Mixed Surfacing	84,524	7,742	92,266
14TC47	Merced	32	A, B	San Luis Creek	0.7	6/23/48	Granite Const. Co.	Bridge & Approaches	119,705	11,489	131,194
10W33	Merced	32	B	At Sta. 344+08		4/25/46	Day Labor	Widen Culvert	927	21	948
1-10TC42	Merced	32	B	Highline Canal to Los Banos	2.0	4/ 1/49	Granite Const. Co.	Plant Mix Surfacing	51,183	1,322	52,505
1-10TC56	Merced	32	B	San Luis Creek to Highline Canal (por.)	4.4	9/15/49	M. J. Ruddy & Son	Surface & Shoulders	96,935	9,600	*106,535
10WC12	Merced	32	C	Bet. San Joaquin Riv. & Madera Co. Line	3.0	6/21/46	Frank B. Marks & Sons	Repair with Untr. Rk. Base & P.M.S.	84,316	5,515	89,831

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14WLC34	Merced	122	A	Across Mud Slough & Garzas Cr.	-----	6/25/46	Dan Caputo	Bridge & Culvert	\$48,486	\$7,166	\$55,652
0-10TC37	Merced	122	Gus, A	Gustine to San Joaquin River	2.7	8/25/48	Elmer J. Warner	Grade & Surfacing	124,375	1,258	125,633
0-10TC49	Merced	123	B	Cox Ferry Bridge to Snelling	6.3	6/ 1/49	River Rock, Inc.	Widen & Surface Shoulders	39,406	3,061	42,467
10DC4	Merced	FAS 914 957 1068									
1-14DC62-P	Merced	FAS 914 1068		Three Locations	18.7	7/ 8/48	Frank B. Marks & Son	Base & Surfacing	206,428	12,192	218,620
14DC59-P	Merced	FAS 919		Various Locations No. of Hillmar & Atwater	-----	1/ 6/50	Kenneth Brown & P. Kaus	Widen 5 R.C. Bridges	14,740	1,572	16,312
10DC8	Merced	FAS 1170		Dry Creek, 7 Mi. South La Grange	-----	11/23/49	C. C. Gildersleeve	Construct Bridge	15,782	2,480	18,262
14TC46	Modoc	28	A	Los Banos to Pipe Line Road	8.7	8/22/49	Covina Const. Co.	Grade, Surface & Widen Bridge	161,696	21,600	*183,296
2TC21P	Modoc	28, 210	A, A	Various Locations	-----	6/11/48	Evans Const. Co.	Minor Contracts & D.L. Projects	32,352	-----	32,352
2T44	Modoc	28	A, B	North Fork of Ash Creek	-----	5/16/47	Harms Bros.	Widen Bridge	7,954	1,099	9,053
2WC2	Mod. Las.	28, 73 210	Various	Lassen County Line to Canby	20.8	4/28/47	Prison Labor	Base and Seal Coat	158,856	14,001	172,857
2W16	Modoc	73	A, B	Adin to Alturas	-----			Widen Structure	52,035	3,947	55,982
2T71	Modoc	73	A, B	See Lassen County	-----						
2T76	Modoc	73	A, B	Bet. Rte. 28 & Oregon State Line	16.2	3/13/46	Prison Labor	Grade & Pave	509,994	25,635	535,629
2T77	Modoc	73	A, B	Route 28 to State Line (Portions)	33.8	7/ 1/48	Prison Labor	Grade	439,941	17,448	457,389
2T76	Modoc	73	A, B	Rte. 28 to Oregon State Line	33.8	7/ 1/49	Prison Labor	Grading	278,742	23,171	*302,013
2T72	Modoc	73	B	Davis Creek to State Line	18.8	7/ 1/49	Day Labor	Prime & Seal Coat	30,000	-----	30,000
14WLC57	Modoc	73	C	Sta. 448+50 to 848+00	7.6	10/11/48	Day Labor	Oiling	7,981	-----	7,981
				Across S. Fork of Pit Riv. at Likely	-----	6/26/47	T. A. Kvale	Reinforced Concrete Bridge	32,062	6,781	38,843

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
2773	Modoc	210	B	At Station 2152+31.7	-----	10/19/48	Day Labor	R. C. Culvert	\$7,757	\$1,117	\$8,874
2DC5P	Mod, Sis	210 FAS 753	B, A	Route 72 to 4 Mi. W. of Hatfield and 2.4 Mi. N. of Stronghold to Oregon State Line	22.8	5/ 1/47	Fairey - Hammond, Inc. & R. A. Parish	Surface & Seal Coat	176,122	17,624	193,746
2DC2	Modoc	FAS 513	B, C, D	Bet. Eagleville & 4 Mi. N. of Lake City	29.5	5/23/46	E. B. Bishop & D. Gerald Bing	Grading & Plant Mixed Surf	404,775	42,373	447,148
2DC9	Mod, Las	FAS 988	-----	See Lassen County	-----	-----	-----	-----	-----	-----	-----
-----	Modoc	-----	-----	Various Locations	-----	-----	-----	Minor Contracts & D.L. Projects	8,212	159	8,371
9X7	Mono	13	A	Bet. Mi. 10.0 & Mi. 12.8	2.8	3/20/47	Day Labor	Widen & Resurface	5,353	-----	5,353
9V14	Mono	23	A	At Rock Cr.	-----	5/ 1/47	Day Labor	Culvert & Approaches	5,392	-----	5,392
9V11	Mono	23	A, B	Bet. Mi. 1.00 "A" & Mi. 3.55 "B"	8.4	3/13/47	Day Labor	Bituminous Surfacing	12,442	-----	12,442
9VC7	Mono	23	I	Bet. Point Ranch & Bridgeport	2.8	5/ 1/47	Geo. E. France	Repair & Plant Mixed Surfacing	40,379	5,091	45,470
9VC24	Mono	40	A	Sta. 0+00 to Sta. 133+00	2.5	7/21/48	Day Labor	Widen & Resurface	56,211	2,695	58,906
9X8	Mono	40	B	Bet. Mi. 0.0 & Mi. 3.4	3.4	3/20/47	Day Labor	Widen & Resurface	12,684	-----	12,684
9XC3	Mono	40	C	Bet. Rte. 23 & Sheep Corral	6.3	6/28/46	Geo. E. France	Road Mix Surfacing	21,496	2,888	24,384
0-9VC12	Mono	40	D	Sheep Corral to Adobe Creek	16.0	5/ 6/48	Oilfields Trucking Co. & Phoenix Const. Co.	Resurfacing	47,402	3,826	51,228
1-9VC20	Mono	76	A, B	South Co. Line to Benton Station	8.7	5/11/49	Arthur A. Johnson	Surface	60,280	5,752	66,032
0-9VC14	Mono	95	A	7 Mi. N. of Coleville to Nevada State Line	2.2	6/ 8/48	Westbrook & Pope	Grade & Surface	119,495	15,671	135,166
9V27	Mono	96	A	4.9 Mi. N. Rte. 23 to Nev. State Line	6.3	-----	Day Labor	Grade, Surface & Drainage	14,999	1,086	16,085
9DC7	Mono	FAS 1092	-----	State Route 23 to 10.5 Mi. Ely	10.8	6/ 8/48	Browne & Krull	Grade & Pen. Treat	43,091	7,061	50,152

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
9DC2	Mono.	FAS 1093		Near Bridgeport on Twin Lakes Rd.	3.9	6/30/47	Dis-Syl Const. Co., Inc.	Grade & Bituminous Surfacing.	\$45,443	\$7,981	\$53,424
9DC3	Mono.	FAS 1094		Near Coleville.	3.4	8/29/47	Nevada Constructors, Inc.	Grade, Pen. Treat. & Tim. Br.	53,294	7,878	61,172
	Mono.			Various Locations			Granite Construction Co.	Minor Contracts & D.L. Projects	3,798		3,798
5TC5	Monterey	2	B	Bet. 2 Mi. S. of Salinas & Salinas	1.9	3/19/46		Grading & A.C. Paving.	208,926	27,880	236,806
5WC4	Monterey	2, 118, 56	B, A, J	Bet. Chualar & 3 Mi. N.; Bet. Salinas & Castroville & Bet. Werner Hill & Watsonville Jct.	3.7	5/ 1/47	Granite Const. Co.	Plant Mixed Surfacing	23,071	995	24,016
51-5TC1	Monterey	2	C	Gonzales to Chualar	4.9	4/ 1/50	Rice Bros., Inc.	Surfacing	83,892	11,500	*95,392
0-5TC10	Monterey	2	G, F	San Ardo to King City	3.6	4/22/48	Granite Const. Co.	Base and Surfacing	202,626	17,098	219,724
1-5TC12	Monterey	2	G, F	San Ardo to King City	4.0	5/19/49	Fredericksen & Kasler	Surfacing	179,492	19,006	198,498
5TC4	Monterey	2	J	Bet. Santa Rita & 0.8 Mi. N. of Crazy Horse Summit.	8.4	1/14/46	A. Teichert & Son, Inc.	Grading & Plant Mixed Surfacing	745,257	66,643	811,900
5TC7	Mon, SBT	2	J, B	Bet. 0.8 Mi. N. of Crazy Horse Summit & Chittenden Rd.	6.7	10/16/46	A. Teichert & Son, Inc.	Grading & Surfacing	740,676	63,346	804,022
5TC23	Monterey	2	J	Sta. 534+80 to 546+50		7/29/48	Day Labor	Outer Highway	13,937		13,937
1-5TC14	Monterey	2, 117	Sal	South City Limits Salinas to S. Main St.	0.8	8/ 3/49	Ted F. Baum	Grade & Surface	184,351	23,071	207,422
0-5TC11	Monterey	56	A	Salmon Creek		8/ 9/48	Matthew & Jorgenson	Const. Culvert & Approaches	91,806	10,156	101,962
1-5TC15	Monterey	56	A	White Creek 16 Mi. N. of San Simeon		11/ 2/49	W. M. Lyles Co.	Const. Drainage System	25,069	2,855	27,924
0-14TC42	Monterey	56	B	Prewitt Creek		5/24/48	Chas. O. Bodenhamer	Repair Bridge	18,737	2,886	21,623
0-14TC49-P	Monterey	56	F, G	15 to 26 Mi. S. of Monterey		6/23/48	C. O. Bodenhamer	6 R.C. Culverts	28,094	3,307	31,401
5W14	Monterey	56	F	At Sta. 385+46		4/15/48	Day Labor	Replace Bridge	5,700		5,700
5WC3	Monterey	117, 56	A, I	Bet. Del Monte Jct. & Seaside Jct.	3.0	6/28/46	N. M. Ball Sons	Grading & Paving	471,166	56,480	527,646

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
5DC5	Monterey	FAS 595		E. of Pajaro on San Juan—Watsonville Rd.	1.6	8/ 4/48	Granite Const. Co.	Grade & Surface	\$118,556	\$13,184	\$131,740
5DC8	Monterey	FAS 662		East City Limits of Monterey to Seaside Jet.	2.7	7/12/49	Granite Const. Co.	Grade & Surface	241,794	21,513	263,307
14DC25	Monterey	FAS 1084		On Sanborn Rd. at S.P. Tracks		9/18/47	Dan Caputo	Overhead Structure	189,249	2,012	182,261
	Monterey			Various Locations				Minor Contracts & D.L. Projects	34,032		34,032
4W27	Napa	6	A	Bet. Mi. 2.7 & Mi. 3.6	0.9	4/22/46	Day Labor	Construct Base & Resurface	9,973		9,973
14TC15	Napa	7	A	At Farm Rd. Undercrossing 4 Mi. N. of Vallejo		8/ 9/46	Minton & Kubon	Reconstruct Undercrossing	11,952	942	12,894
1-10TC53	Nap. Sol.	7	A, H	1/4 Mi. W. Napa Co. Line to Cordelia Underpass	4.2	8/17/49	Parish Bros.	Pave with P.C.C.	297,758	28,900	*326,658
1-10TC36	Nap. Sol.	7	A, H	1 Mi. W. Napa Co. Line to Cordelia Underpass	4.6	7/17/48	Parish Bros.	Grade	581,857	60,000	*641,857
1WLC6	Nap. Lak.	49	A, A	Bet. 0.1 Mi. Northerly & 1.5 Mi. Northerly of Napa-Lake County Line	0.8	3/24/47	Pionbro Const. Co.	Grade, Surface & 2 Bridges	212,462	20,343	232,805
4TT11	Napa	49	A	N. of Calistoga to Lake Co. Line	6.9	8/11/48	Day Labor	Resurface	49,300	2,000	*51,300
1-14TC71	Napa	49	D	Napa Creek near West Co. Line		7/12/49	Dan Caputo	Const. Bridge & Approaches	38,754	3,352	42,106
0-4TC73	Napa	74, 8	A, B	Bet. Kelly Curve & Glass House Curve & bet. Rte. 74 & Napa Wye	2.4	11/ 5/48	Fredrickson Bros.	Grade & Pave	299,711	36,000	*335,711
4DC6	Napa	FAS 607		Silverado Trail, 4 Mi. NW. of Napa to Calistoga	4.7	5/ 1/47	Geo. E. Murray	Grade, Surface & Bridge	95,979	2,014	97,993
4DC12	Napa	FAS 776		Bet. Intersection FAS, Rte. 8-B with Imola Ave. & Intersection of FAS, Rte. 8-A with Foster Road & on South Jefferson to So. City Limits of Napa	1.7	11/22/48	A. Teichert & Son, Inc.	Grade & Pave	114,734	6,702	121,436
	Napa			Various Locations				Minor Contracts & D.L. Projects	18,562		18,562
1-3TC63	Nevada	15	A	At Squirrel Creek 5 Mi. W. of Grass Valley	0.1	6/22/49	Miles & Bailey	Grade & Surface, Culverts	28,907	4,000	*32,907

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost.	Const. engr.	Total
3TC41-F	Nevada.....	17	B	½ Mi. N. of Rattlesnake Cr. to Grass Valley.....	3.8	10/22/47	Fredrickson Bros.....	Base & Surfacing.....	\$350,170	\$42,250	\$392,420
3T58	Nevada.....	25	NevC, A	Nevada City to 1.75 Mi. NW.....	1.7	10/29/46	Day Labor.....	Grade.....	35,762	2,414	38,176
3TC38	Nevada.....	25	NevC, A	Bet. E. Broad St. in Nevada City & 2 Mi. Northwestly.....	1.9	6/26/47	J. Henry Harris.....	Surfacing.....	52,681	5,559	58,240
3TC45	Nevada.....	37, 38	B, C, A	Three Locations.....	3.7	12/12/47	H. Earl Parker, Inc.....	Grade & Surface.....	179,475	18,718	198,193
3T91	Nev. Pla.....	37	B, C, D	See Placer County.....							
3WC9	Nev. Pla.....	38	A, B, C	See Placer County.....							
1-3TC64	Nevada.....	38	A	In Truckee at Commercial Row & Bridge Sts.....	0.5	6/23/49	J. Henry Harris.....	Grade & Surface.....	66,155	9,400	*75,555
	Nevada.....			Various Locations.....				Minor Contracts & D.L. Projects.....	6,437		6,437
7VC27	Orange.....	2	A	Bet. 1 Mi. N. of Doheny Park & San Juan Cr.....	0.9	1/2/47	Cox Bros. Const. Co.....	Grade & Pave.....	113,968	12,810	126,778
7VC42	Orange.....	2	A, B	Bet. 1 Mi. S. of Gallivan & 1.4 Mi. N. of El Toro Rd.....	3.4	6/30/47	Jesse S. Smith.....	Repair Shldr.....	15,657	1,560	17,217
7VC33	Orange.....	2	B	Near Irvine about 6 Mi. S. of Tustin.....		3/26/47	Catalina Const. Co.....	Two Culverts.....	59,695	5,735	65,430
7VC45	Orange.....	2	B	Bet. El Toro & Irvine.....		8/22/47	O'Brien & Bell Const. Co.....	U.T. Rock Base & P.M.S.....	60,006	5,552	65,558
7VC19	Orange.....	2	B, C	Bet. 1.4 Mi. N. of El Toro Rd. & S. City Limits of Tustin.....	2.2						
					8.3	6/20/46	John J. Swigart Co.....	Repair with P.M.S. & Widen Shldr.....	96,730	7,634	104,364
1-7VVC18	Orange.....	2, 43 171	C, A, B	Grand Ave. at Commonwealth Ave. East First at Tustin Ave.....		11/18/49	Clinton Electric Corp.....	Signals & Lighting.....	18,464	2,500	*20,964
7V133	Orange.....	2	F	Sta. 83+00 to Sta. 99+70.....	0.3	6/30/48	Day Labor.....	Drainage Improvement.....	16,879	511	17,390
7VC55-P	Orange.....	2, 178	Ana	Los Angeles St. & Center St.....		1/21/48	Prescott Elec. & Mfg. Co.....	Signals & Lighting.....	43,000	2,560	45,560
11VC5	Ora, SD.....	2	SCle, D	See San Diego County.....							
7VC17	Orange.....	2	SCle	At Rte. 2 & Avenida Del Mar.....		3/1/46	C. D. Draucker Co.....	Install Signals.....	5,570	726	6,296
7VC48	Orange.....	2	SCle	Bet. San Diego Co. Line & Valencia St. in San Clemente.....	1.8	11/3/47	O'Brien & Bell Const. Co.....	Grade & Surface.....	93,037	13,503	106,540

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost.	Const. engr.	Total
11V16	Ora, SD	2	SCle, D	See San Diego County							
51-7VC6	Orange	2	SCle	On, C, 1.77 at Avenida Valencia to Mile 3.89	2.1	4/ 1/50	Sully-Miller Contr. Co.	Surface	\$38,370	\$5,000	*\$43,370
7V156	Orange	2	SCle	Valencia Ave.	2.1	2/ 1/50	Day Labor	Subsealing	14,782		14,782
1-7VVC21-P	Orange	2	Tus	"D" St. at Main St.		3/14/50	Electric & Machinery Service, Inc.	Signals & Lights	8,506	900	*9,406
7V138	Orange	19	Ful	Sta. 35+00 to Sta. 108+50	1.4	12/17/48	Day Labor	Road Mix Shoulders	10,040		10,040
7VC71	Orange	43, 179, 183									
0-7VC85	Orange	43	A, A, A	On Harbor Blvd.		4/ 1/48	Tri-Cities Elec. Serv.	Signals & Lighting	30,239	1,273	31,512
7VC76	Orange	60	A, NptB	Bet. Heim Ave. & Peralta School	4.9	7/29/48	Peter Kiewit Sons' Co.	Grade & Surface	792,908	86,120	*879,028
7V124	Orange	60	A, B, NptB	1.3 Mi. S. of Los Patos Ave. to Rte. 43	5.5	6/ 4/48	Sully-Miller Contr. Co.	Resurfacing	233,050	13,952	247,002
7VC67	Orange	60	A	1.3 Mi. S. of Los Patos Ave. to Rte. 43	5.3	5/11/48	Day Labor	Subsealing	19,080		19,080
14VC17	Orange	60	B	Bet. Los Patos Ave. & 1.3 Mi. Southerly	1.3	4/ 1/48	O'Brien & Bell Const. Co.	Grade & Plant Mixed Surfacing	64,528	3,542	68,070
14VC13	Orange	60	C	Across North Arm of Newport Bay		9/13/46	Case Construction Co.	Repair Bridge	35,880	3,746	39,626
1-7VVC23	Orange	60	C	Bet. Dana Point & Doheny Park	0.4	5/29/46	C. B. Tuttle & Schmidt Bros. Contractors	Widen & Surface with P.M.S. & Widen 2 Bridges	206,390	20,284	226,674
7VC43	Orange	60	LgnB	Pacific Coast Highway at 3rd Ave. in South Laguna		4/26/50	Clinton Electric Co.	Signals & Lights	4,046	400	*4,446
7VC29	Orange	60	LgnB, C	In Laguna Beach on Coast Blvd., Bet. Diamond St. & Myrtle St.		6/30/47	Tri-Cities Elec. Service	Traffic Signals	22,277	3,238	25,515
0-7VC75-P	Orange	60	NptB	Bet. Laguna Beach & Dana Point	4.9	1/30/47	Cox Bros. Const. Co.	Grade & Surface	240,110	28,048	268,158
7VC51	Orange	60	NptB, B, A	Rte. 43 to Irvine Ave.	0.6	5/13/48	Baker & Pollock	Surfacing	44,132	4,066	48,198
7VC18	Orange	60	SIB, A	Newport Beach & Vicinity		12/18/47	C. D. Draucker Co.	Signals & Lighting	76,997	2,447	79,444
7VC20	Ora, LA	60, 168	SIB, B	Bet. Los Patos Ave. in Sunset Beach & Second St. in Seal Beach	2.3	4/30/46	Griffith Company	Widen Shldrs & Resurface	44,921	4,005	48,926

See Los Angeles County

DEPARTMENT OF PUBLIC WORKS

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
7V135	Orange	171	A	13th St. to Hazard St.	---	9/ 3/48	Day Labor	Drainage Correction	\$14,196	---	\$14,196
7X98	Orange	171	A	13th St. to 15th St.	---	9/11/47	Day Labor	Side Drain	6,852	\$347	6,852
7V155	Orange	171	A	Garfield Ave. to South of Jct. with Rte. 179	5.43	2/21/50	Day Labor	Subsealing	7,701	---	7,701
1-7VC138	Orange	171	B	Grand Ave., Artesia to A. T. & S. F. Underpass	0.4	12/14/49	Cox Bros. Const. Co.	Widen & Surface	18,622	2,800	*21,422
7X59	Orange	174, 171	A, B	At Intersection of Grand Ave. & Manchester Ave.	---	6/28/46	Day Labor	Widen Pav't & Channelize	9,864	1,132	10,996
7XC31	Oran, LA.	174	A, B	See Los Angeles County	---	---	---	---	---	---	---
7X85	Orange	175	B	Bet. Rte. 2 & Rte. 43	4.5	3/31/47	Day Labor	Repair Shlds.	5,825	---	5,825
0-7VC118	Orange	175	B	At Yorba Road	0.5	5/26/49	K. & H. Company	Grade & Surface	47,447	5,255	*52,702
14VLC4	Orange	176	A	Across Coyote Cr. W. of Brea	---	11/ 3/47	O. B. Pierson	Reinforced Concrete Bridge	25,916	5,583	31,499
1-7VC111	Orange	176	A	At Coyote Creek	---	4/20/49	Jas. R. Mathews Excavating Co.	Install Culvert	10,412	1,542	11,954
0-14VC73	Orange	178	A	Santa Ana River	0.7	10/29/48	Charles MacClosky Co.	Const. Bridge & Approach	296,780	22,483	319,263
7XC17	Orange	183	A	Bet. Verano St. & W. City Limits of Santa Ana	1.8	6/ 7/46	John J. Swigart Co.	Resurface with P.M.S. & Widen Shlds.	26,608	3,447	30,055
7V143	Orange	184	S.A. A	Delhi Rd. to Newport Rd.	1.7	3/29/49	Day Labor	Resurfacing	38,909	1,964	40,873
7DC5-P	Orange	FAS 737	---	Los Angeles Co. Line to Manchester Ave.	3.1	8/12/49	Sully-Miller Contr. Co.	Grade & Surface	110,960	2,000	*112,960
7DC2	Orange	FAS 742	---	On Harbor Blvd., Bet. Wilson St. in Costa Mesa & Manchester Ave. S. of Anaheim	11.2	12/31/46	Griffith Company	Widen & Surface	238,466	13,699	252,165
7DC4	Orange	FAS 749	---	Two Locations	3.8	7/29/48	Sully-Miller Contr. Co.	Grade & Surface	118,226	1,336	119,562
7VC52	Oran, LA.	Var	---	See Los Angeles County	---	---	---	---	---	---	---
7XC26	Oran, LA.	Var	---	See Los Angeles County	---	---	---	---	---	---	---
-----	Orange	-----	-----	Various Locations	-----	-----	-----	Minor Contracts & D.L. Projects	44,350	-----	44,350

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
3T51	Placer	3	A	Bet 1.9 Mi. N. of Roseville & 1.0 Mi. S. of Lincoln	5.1	8/22/46	Day Labor	Construct Borders	\$17,742	\$387	\$18,128
1-3TC66	Placer	3	B	At Sheridan	0.3	7/22/49	Rice Brothers, Inc.	Grade & Surface	30,783	3,500	*34,283
1-3TC65	Pla, Yub	3	B, A, B	N. of Lincoln to S. of Marysville	20.2	7/19/49	O'Conner Bros.	Extend Drainage Facilities	43,841	4,400	*48,241
0-14TC55	Placer	3	Rsv, A	In Roseville	3.3	10/19/48	Guy F. Atkinson Co.	Grade & Pave.	1,328,457	148,000	*1,476,457
3TC34	Placer	17, 37	B, Aub	At Nevada St. & East St. Undercrossing	---	4/ 1/47	L. H. Leonardi Elec. Const. Co.	Lighting System	10,087	911	10,998
3TC33-F	Placer	17	C	Wise Canal to Rock Cr.	1.9	3/11/47	Fredrickson & Watson Const. Co.	Grade, Surface, & Underpass	241,158	28,600	*269,758
3TC32	Placer	17	Aub, C	Bet. Rte. 37 in Auburn & Wise Canal	1.7	9/16/46	Fredrickson & Watson Const. Co.	Grade & Surface	186,350	18,139	204,489
3TMC14	Placer	17	Rsv	Bet. Jefferson St. & E. City Limits of Roseville	0.9	4/22/48	J. R. Reeves	Plant Mixed Surfacing	8,253	---	8,253
3TC27	Placer	17, 37	B, Aub, A	Bet. 0.1 Mi. W. of Nevada St. & 1 Mi. E. of Auburn	2.6	6/24/46	Fredrickson & Watson Const. Co.	Grade & Surf. with P.C.C. & P.M.S.	632,576	59,879	692,455
3T91	Pla, Nev.	37	C, D, E, F, B, C, D	Colfax to Truckee	---	7/ 1/49	Day Labor	Parking Areas	27,593	---	27,593
3TC50	Placer	37	Aub, A	Nevada St. to ½ Mi. E. of Auburn	1.8	4/ 1/48	Fredrickson & Watson Const. Co.	Fence & Barrier Posts	12,872	985	13,857
14TC8	Placer	37	Aub	Over Tracks of S.P.R.R. in Auburn	---	1/ 8/46	H. W. Ruby	Steel Beam Overcrossing	94,387	6,922	101,309
14TC4	Placer	37	Aub	East St. Undercrossing in Auburn	---	1/ 5/46	H. W. Ruby	Steel Beam Undercrossing	59,712	5,983	65,705
14TC7	Placer	37	Aub	Walsh St. Undercrossing	---	1/ 3/46	Wm. E. Thomas Const. Co.	R.C. Undercrossing	30,584	4,436	35,020
3WC9	Pla, Nev.	38	B, C, A	Bet. 4.7 Mi. W. of Tahoe City & Nevada County Line	8.5	6/28/46	Clements & Co.	Repair with P.M.S. & Seal Coat	133,935	12,132	146,067
14WLC41	Pla, ED	65	A, A	N. Fork American River	0.3	9/16/46	H. W. Ruby	Bridge & Approaches	250,236	16,697	266,933
3T92	Placer	65	Aub	0.4 Mi. W. Auburn City Limits to R.R. Underpass	0.26	7/ 1/49	Day Labor	Grade & Surface	22,014	1,600	*23,614

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
3DC5	Placer	FAS 768, 769 770		Loomis to Auburn & FAS Rte. 768 to Newcastle.	11.9	8/ 7/47	H. Earl Parker, Inc.	Grading.	\$138,611	\$16,912	\$155,523
	Placer			Various Locations				Minor Contracts & D.L. Projects	4,696		4,696
1-2TC37	Plumas	21	A	Rock Cr. to Belden.	3.4	7/ 7/49	Granite Const. Co.	Grade & Surface	155,707	23,497	179,204
0-2TC26	Plumas	21	A	Bet. Rock Cr. & Belden.	1.9	4/21/48	Piombo Const. Co. & M. & K Corp.	Grading.	886,745	166,739	*1,053,484
2TC29	Plu, Sha, Tri.	21, 20	B,B,A	Near Keddie, Schilling, & Douglas City		6/24/48	Liston Ehorn.	Truck Scales.	25,374	3,903	29,277
1-2TC38	Plumas	29	A	Rte. 83 to 1.4 Mi. E. of Chester.	4.4	7/20/49	Clements & Co.	Grade & Surface	146,569	18,950	165,519
14TC14	Plumas	29	A	Across N. Fork of Feather River at Chester		8/ 9/46	C. C. Gildersleeve.	Sidewalks on Bridge	6,288	179	6,467
2TC20	Plu, Las	29	A, A	Bet. 0.3 Mi. W. & 0.8 Mi. E. of Plumas-Lassen County Line.	1.1	4/21/47	Fredrickson & Watson Const. Co.	Grade & Surface	89,551	9,645	99,196
0-14TC40	Plumas	83	A	Across Sulphur Cr.		4/19/48	Chittenden & Chittenden.	Bridge & Approaches	51,802	8,559	60,361
14DC1	Plumas	FAS 523		At Hamilton Branch.		5/ 9/45	Kiss Crane Co.	Steel Girder Bridge	69,653	7,875	77,528
2DC4	Plumas	FAS 523		Bet. Rte. 83 near Almanor & Plu-Las. County Line, 2 Mi. W. of Westwood	9.9	8/ 7/46	Fredrickson & Watson Const. Co.	Grade & Surface	366,487	37,070	403,557
	Plumas			Various Locations				Minor Contracts & D.L. Projects	33,733	5	33,738
8VC6	Riverside	19	A	Bet. Mira Loma & 2.5 Mi. W. of Riverside.	5.9	12/14/45	Geo. Herz & Co.	Grading & Plant Mixed Surfacing	686,302	40,183	726,485
8VC11	Riverside	19	A	Bet. Mira Loma & 2.5 Mi. W. of Riverside.	5.9	3/20/47	George Herz & Co.	Seal Coat	8,604	934	9,538
8VC10	Riv, SBd	19	A, B	See San Bernardino County							
8VC12	Riv, SBd	19, 43, 9	A, A, A	See San Bernardino County							
0-8VC41	Riverside	19	A	Mira Loma to 2.5 Mi. W. of Riverside.		6/28/49	Covina Const. Co.	Grade & Surface	40,206	9,000	*49,206

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
1-8VVC3	Riverside	19	Riv	Pepper St. at 7th St.	---	8/18/49	Ed Seymour	Signals	\$10,832	\$1,500	*\$12,332
8VC23	Riverside	26	C	ECL of Banning to Rte. 187	10.5	5/27/48	Basich Bros. Const. Co. & Basich Bros.	Surfacing	117,015	10,896	180,911
14VC43	Riverside	26, 64	C, Q	NW. of Indio & W. of Indio	---	12/31/47	E. S. & N. S. Johnson	Redeck 5 Bridges	35,202	4,902	40,104
1-8VC32	Riverside	26	D	Garnet to Edom	10.4	4/ 1/49	R. P. Shea Const. Co.	Plant Mix Surfacing	132,043	14,000	*146,043
0-11VC27	Riverside	26	E	Edom to 2.9 Mi. N. of Indio	7.4	4/ 1/48	R. P. Shea Co.	Surfacing	78,430	8,399	86,829
8VC9	Riverside	26	Ban, B	Bet. Midway & E. City Limits of Banning	3.1	6/25/46	Herz Paving Co.	Repair with P.M.S. & Grade Shlders	52,245	2,755	55,000
0-8VMC4-P	Riverside	26	Bau	Magnolia Ave. to Pennsylvania Ave.	0.6	9/ 8/48	Foster & McHarg	Curbs & Gutters	10,442	1,515	11,957
0-14VC51	Riverside	43	B	At Temesca Wash.	0.5	4/ 1/48	Dimmit & Taylor & K. B. Nicholas	Bridge & Approaches	168,546	16,979	185,525
1-8VC36	Riv, SBd	43	Riv, C, F	Russel St. to SBd. County Line	2.6	5/26/49	J. A. Payton	Grade & Surface	474,403	70,000	*544,403
1-11VC39	Riverside	64	B, D	Bet. Shavers Well & Desert Center & Bet. 4 Mi. W. Hopkins Well & Black Butte	10.9	4/21/49	Hensler Const. Corp.	Road Mix Surfacing	65,976	6,172	72,148
11VC8	Riverside	64	C, D	Bet. 6 Mi. E. of Desert Center & Hopkins Well	10.4	4/30/47	Arthur A. Johnson	Road Mix Surfacing & Seal Coat	57,207	5,633	62,840
11XC15	Riverside	64, 146	E A, B, C, D, E	Bet. 1.9 Mi. W. of Pallowalla & 3.9 Mi. W. of Blythe & Bet. 3.6 Mi. N. of Imp. Co. Line & 1.8 Mi. S. of SBd Co. Line	12.3	4/11/47	MacArthur & Son	Repair with R.M.S.	50,319	3,021	53,340
0-11VC32-P	Riverside	64	E, Bly	4 Mi. W. of Blythe to Colorado River	8.3	6/24/48	Basich Bros. Const. Co. & Basich Bros.	Base & Surfacing	230,954	17,809	248,763
11VC21-F	Riverside	64	E, Bly, F	4 Mi. W. of Blythe to Colorado River	1.8	1/20/48	Arthur A. Johnson	Grade, B.S.T. & Structure	207,092	27,037	234,129
0-14VC78	Riverside	64	H	Sleepy Draw	---	2/ 3/49	John Strona	Bridge	29,580	3,936	33,516
14VC21	Riverside	64	H	Across Coachella Canal 5 Mi. E. of Indio	---	11/14/46	F. Predenburg	R.C. Slab Bridge	37,433	3,429	40,912
14VC19	Riverside	64	H, B	Near Indio	---	9/13/46	E. G. Perham	Repair 5 Bridges	37,195	3,714	40,909
1-14VC94	Riverside	64	H	Smokey Gulch & Coachella Storm Drain	---	9/23/49	K. B. Nicholas	Redeck One Bridge & Const. One Bridge	94,188	9,365	103,553
8VMC2	Riverside	64	Hem	State St. to East City Limits	0.8	6/ 8/48	R. A. Erwin	Surfacing	12,120	---	12,120

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
1-8VC33	Riverside	64, 194	Hem	West City Limits to State St. & Rte. 64 to N.C.L.	1.5	4/ 1/49	Geo. Herz & Co.	Surfacing	\$18,152	\$1,029	\$19,181
8VC27	Riverside	77	A	San Diego Co. Line to N. of Temecula	5.9	6/24/48	Morrison - Knudsen Co., Inc.	Grade, Surface & Const. Bridges	698,512	81,067	*779,579
1-8VC37	Riv, SBd	77	C, A	See San Bernardino County							
11V52	Riv, S.D.	77	F, G, A	See San Diego County							
11X30	Riv, S.D.	77	F, F, G	See San Diego County							
11XC13	Riverside	146	A, B, C, D, E	Bet. 1.3 Mi. N. of Imp. Co. Line & 0.5 Mi. S. of S. Bd. Co. Line	15.4	8/21/46	Arthur A. Johnson	Repair with Imp. Base Matl. & R.M.S.	54,272	5,029	59,901
0-14VC88	Riverside	146	A, B, C	3.3 Mi. N. Imp. Co. Line to 4 Mi. N. Blythe		6/18/49	E. G. Perham	Const. Bridge	47,600	7,442	55,042
11VC28	Riverside	187	B, F	SE. of Mecca to S. of Thermal	6.8	5/21/48	Hensler Const. Co.	Grade, BST, & Structures	409,443	34,420	443,863
0-8VC22	Riverside	187	C	0.1 Mi. to 0.6 Mi. E. of Cathedral City	0.5	5/13/48	Westbrook & Pope	Grade & Surface	54,375	4,574	58,949
8XC13	Riverside	187	C	Near Cathedral City		8/29/47	R. P. Shea Company	Construct Dips	6,491	1,369	7,860
8VC16	Riverside	187	D	White Water Point to ½ Mi. N. of Palm Springs	4.1	12/11/47	Peter Kiewit Sons' Co.	Grade, Surface, & Structure	357,164	41,590	398,754
1-8VC34	Riverside	187	PSp	In Palm Springs	2.5	5/10/49	R. P. Shea Co.	Plant Mixed Surfacing	23,214	1,723	24,937
0-8VC26	Riverside	193	B	Bellgrave Ave. to Rte. 19	3.0	6/10/48	R. A. Erwin	Surfacing	55,228	5,183	60,411
8X5	Riverside	194	A	Bet. Sage & Jet. of Rte. 78		5/20/46	Day Labor	Grading, Surfacing & Culverts	14,472		14,472
0-14VC70	Riverside	194	C	Potrero Creek		9/29/48	H. R. Breedon	Bridge & Approaches	15,090	3,380	18,470
8DC5	Riv, SBd	FAS 695		On Archibald Ave., Bet. Cloverdale Ave. & Valley Blvd.	6.0	9/ 4/47	Peter Kiewit Sons' Co.	Grade, IB & P.M.S.	190,421	17,609	208,030
8DC3	Riverside	FAS 699		On Jurupa Ave., Bet. Mira Loma & Sunnyslope	5.3	7/ 8/47	Peter Kiewit Sons' Co.	Grade & P.M.S.	111,807	11,499	123,306
8DC1	Riverside	FAS 706		On "B" St. & Crestmore Rd.	2.9	3/12/47	E. L. Yeager	Grade & Surface	117,067	9,902	126,969

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14DC29	Riverside	FAS 720		At Santa Gertrudis Cr.	0.4	10/ 9/47	Foster & McHarg	Reinforced Concrete Bridge	\$37,335	\$1,409	\$38,744
11DC2	Riverside	FAS 1162		On Jackson St.	5.0	10/29/48	Foster & McHarg	Grade & B.S.T.	101,229	6,000	107,229
	Riverside			Various Locations				Minor Contracts & D.L. Projects	26,929		26,929
3TC21	Sacramento	3	B	Bet. North Sacramento Viaduct & 0.5 Mi. E. of Ben All.	4.1	12/20/45	Guy F. Atkinson Co.	Grade, P.C.C. Paving & Structures	1,758,709	150,548	1,909,257
0-3TC55	Sacramento	3	B	North Sacramento Freeway	3.7	12/ 3/48	Fred Kaus	Barrier Posts	8,620	1,700	*10,320
3TC56	Sacramento	3	B	North Sacramento Freeway	0.3	8/ 5/48	Day Labor	Signs & Stripe	8,021		8,021
3TC57	Sacramento	3	B	North Sacramento Freeway	0.3	8/ 4/48	Day Labor	Cuts & Fills	5,375	1,005	6,380
0-3TC56	Sacramento	3	B	North Sacramento Off-Ramp	0.2	12/ 4/48	McGillivray Const. Co.	Grade & Surface	11,783	2,150	*13,933
3TC43	Sacramento	3	B	N. Sacramento Viaduct to Howe Ave.		11/13/47	Luppen & Hawley, Inc.	Lighting	30,372	1,807	32,179
3TC46	Sacramento	3	B	N. Sacramento Viaduct 0.5 Mi. E. Den All.		2/ 4/48	Master Plumbing & Heating Co., Inc.	Landscape	79,029	8,050	*87,079
1-3TTC4	Sacramento	3	B	E. End of N. Sacramento Viaduct		11/29/49	L. H. Cornardi Electric Const. Co.	Illuminated Sign Bridge	4,146	550	*4,696
3TC30	Sacramento	3	N Sac	Bet. Birch Ave. & El Camino Ave.		8/27/46	R. Flatland	Traffic Signals	21,788	2,531	24,319
3TC44P	Sacramento	4	B, Sac	Stockton Blvd. at 14th Ave.		12/17/47	A. Teichert & Son, Inc.	Widening & Signals	24,473	3,454	27,927
1-3TTC5	Sacramento	4	Sac	Stockton Boulevard at Fruitridge		12/19/49	A. Teichert & Son, Inc.	Signals, Lights, Improve Inters.	23,408	1,800	*25,208
COFC3	Sac, C.C.	11	A, C	See Contra Costa County							
3TC36	Sacramento	11	B, Fol	Bet. 12 Mi. E. of Sacramento & Riley St. in Folsom	5.4	5/12/47	Harnus Bros.	Surfacing with P.M.S.	55,606	4,623	60,229
0-3TC54	Sacramento	11	B, A	West of Nimbus to East of White Rock	7.3	6/18/48	George Pollock Co.	Grade, Pave & Structure	685,434	66,000	*751,434
10WC13	Sacramento	11	C	Bet. Antioch Br. & Emmaton	3.4	6/11/46	Sheldon Oil Co.	Repair with Imp. Bor. & Bit. Surf. Treat.	39,557	3,979	43,536
14WLC53	Sacramento	11	C	At Three Mile Slough		6/20/47	Johnson Western Co.	Bridge Substructure	236,677	18,643	255,320
10TC26	Sacramento	11	C	Three Mile Slough	1.2	1/26/48	Sheldon Oil Co.	Grade & Surface Approaches	66,328	8,354	74,682
14TC32	Sacramento	11	C	Three Mile Slough		11/ 5/47	Judson - Pacific - Murphy Corp.	Steel Bridge	554,902	34,998	589,900

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
10W55	Sacramento	11	G	Bet. Rio Vista Br. & 2.0 Mi. Northerly	1.9	5/ 7/47	Day Labor	Resurfacing	\$10,864	\$595	\$11,459
3TC39	Sacramento	11	Fol, A	Bet. Sutter St. in Folsom & 3.7 Mi. E.	4.2	7/11/47	Brighton Sand & Gravel Co.	Plant Mixed Surfacing	37,884	2,338	40,222
14WLC47	Sac, Sol.	53	A, C	See Solano County							
10W56	Sacramento	53	D	Bet. Isleton & Georgiana Slough	1.7	5/ 7/47	Day Labor	Resurfacing	11,495	590	*12,085
0-3TC52	Sacramento	54	B	At Sloughhouse	1.6	5/11/48	Brighton Sand & Gravel Co. & Lew Jones Const. Co., Inc.	Grade, Surface & 3 Bridges	209,670	24,500	*234,170
1-3TTC1	Sacramento	98	A	Intersection Fulton & Marconi Aves.		8/17/49	L. H. Leonardi Electric Const. Co.	Signals & Lights	12,817	1,200	*14,017
1-3TTC2	Sacramento	98	A	On Fair Oaks Blvd. at Howe Ave.	0.4	10/ 4/49	A. Teichert & Son, Inc.	Grade, Surface, Signals & Lights	40,143	4,350	*44,493
14DC5	Sacramento	FAS 537		Across Arcade Cr. on Madison Ave.		3/ 5/47	Wm. E. Thomas Const. Co.	R. C. Slab Bridge	18,706	2,185	20,891
14DC4	Sacramento	FAS 900		Across Bear Slough		10/ 3/46	M. A. Jenkins	R. C. Slab Bridge	67,604	3,897	71,501
3DC3	Sacramento	FAS 929		On Marconi Ave., Bet. Howe Ave. & Fair Oaks Blvd.		6/30/47	McGillivray Const. Co.	Grade & Plant Mixed Surfacing	111,063	9,245	120,308
14DC6	Sacramento	FAS 933		Across Laguna Cr.	4.7	10/15/46	Bati Rocca	R. C. Slab Bridge	34,095	2,295	36,390
3DC1	Sacramento	FAS 937		On Howe Ave., Bet. Fair Oaks Blvd. & Arden Way	1.6	3/17/47	Westbrook & Pope	Grade, Widen, & Surface	50,170	5,852	56,022
3DC6	Sacramento	FAS 937		Arden Way to Route 3	1.9	8/13/47	George E. France	Grade, Base & Armor Coat	65,747	5,507	71,254
0-3TMC15	Sacramento	Var	Sac	In Sacramento	6.9	9/27/48	A. Teichert & Son, Inc.	Surfacing	110,062		110,062
	Sacramento			Various Locations				Minor Contracts & D. L. Projects	25,038	293	25,331
5TC6	San Benito	2	A	Bet. Prunedale Jct. & SCI Co. Line	1.6	6/11/46	Granite Const. Co.	Repair with Cement Treat. & P. M.S.	57,435	3,111	60,546
5TC7	SB4, Mon.	2	B, J	See Monterey County							

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
5TC9	San Benito	22	C	Bet. Rte. 2 & San Juan Bautista	2.2	6/26/47	A. Teichert & Son, Inc.	Repair with Imp. Bor. & Bit. Surf.	\$35,565	\$2,415	\$37,980
0-14TC38	SBd, SCR	67	A, A	At Pajaro River	0.9	4/ 1/48	Dan Caputo & Edward Keeble	Const. Bridge & Approaches	184,992	23,877	208,869
5W10	San Benito	119	C	At Late Cr.	---	3/27/47	Day Labor	Replace Bridge	5,778	---	5,778
5DW1	San Benito	119	E	Bet. 2.5 Mi. S. of Hollister & Hollister	2.6	4/ 4/47	A. Teichert & Son, Inc.	Grade & Plant Mixed Surfacing	136,987	16,015	153,002
0-5TC13	San Benito	119	E	Tres Finos to 0.25 Mi. North	0.3	6/22/49	Granite Const. Co.	Grade & Surface	29,362	5,698	35,060
14DC48	San Benito	FAS 670	---	North of Hollister	---	4/ 1/49	Wm. E. Thomas Const. Co.	Construct 6 Bridges	27,290	846	28,136
---	San Benito	---	---	Various Locations	---	---	---	Minor Contracts & D.L. Projects	9,468	---	9,468
14VC31	San Bernardino	9, 190	A, A	Across Day Canyon Flood Channel about 3 & 7 Mi. E. of Upland	---	5/16/47	George W. Peterson	Two Bridges	73,669	9,015	82,684
8VC12	SBd, Riv	9, 19 43	A, A, A	Bet. E. City Limits of Upland & 0.6 Mi. E. of Hart Ave. Bet. 2.4 Mi. & 0.3 Mi. W. of Riverside & Bet. Panorama Point & Squirrel Inn	10.7	5/ 5/47	Matich Bros.	Plant Mixed Surfacing & Seal Coat	111,027	6,537	117,564
0-8VC20	San Bernardino	9	D, Upl, A, C	Los Angeles County Line to San Bernardino	9.0	4/15/48	Matich Bros.	Surface and Seal Coat	147,972	8,562	156,534
8VC19	San Bernardino	9, 192	Upl	Foothill Blvd. & Euclid Ave.	---	4/ 1/48	Tri-Cities Elec. Serv.	Signals & Channelization	18,840	1,663	20,503
1-8VVC4-P	San Bernardino	9, 31	SBd	Mt. Vernon Ave. at 5th, 6th, 7th, & Baseline Sts.	---	10/15/49	C. D. Draucker, Inc.	Signals & Lighting	18,008	1,500	*19,508
8VC14-TP	San Bernardino	19	A, Ont, B	Los Angeles County Line to 0.6 Mi. E. of Ontario	5.7	10/14/47	Morrison-Knudsen Co.	Grade & Surface	905,990	79,908	985,899
8VC10	SBd, Riv	19	B, A	Bet. 0.5 Mi. E. of Ontario & Mira Loma	5.8	9/23/46	Peter Kiewit Sons' Co.	Grade & Surface	420,908	44,108	465,016
8VC15	San Bernardino	19, 192	Ont	Euclid Ave. & Route 19	---	10/29/47	Paul R. Gardner	Signals	12,969	1,186	14,155

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14VC12	San Bernardino	26	A	Across Mission Storm Drain		3/1/46	Carl Broome	Widen Bridge	\$11,391	\$2,831	\$14,222
8VC24	San Bernardino	26	A	On Colton Ave.		6/4/48	Els-Hokin & Galvan	Signals	19,029	1,506	20,535
1-8VVC2-P	San Bernardino	26, 43	A, SBd	Intersection at "E" St., Colton Ave. & Mill St. at S.C.L.		8/12/49	Westates Electrical Const. Co.	Widening, Signals & Lighting	23,838	2,000	*25,838
1-8VVC5	San Bernardino	26	C	Intersection of Holt & Central Avenues		2/10/50	Clinton Electric Corp.	Signals & Lighting	8,509	1,000	*9,509
8XC12	San Bernardino	26	D	Bet. Etiwanda Ave. & Mulberry Ave.	0.9	6/4/47	George Herz & Co.	Grade, Pave. & Structures	386,376	34,634	431,010
8VC29	San Bernardino	26	D	2.7 Mi. W. of Colton	0.1	4/22/48	R. A. Erwin	P.M.S. & P.C.C.	5,227	1,324	6,551
8XC4	San Bernardino	26	D	Bet. Vineyard Ave. & Etiwanda Ave.	3.7	3/29/46	Grading, P.C.C. Paving & Bridges	Grading, P.C.C. Paving & Bridges	497,645	41,483	539,128
8XC6	San Bernardino	26	D, Ria	Bet. Mulberry St. & Colton	9.8	12/28/45	Griffith Company	Grading, P.C.C. Paving & Overcrossing	1,452,014	69,764	1,521,778
8XC12	San Bernardino	26	D, Ria	Kaiser Springs to Colton		3/27/47	Day Labor	Landscaping	14,990		14,990
8V32	San Bernardino	26	E, A, Rd	E St. to State St.	7.2	2/28/49	Day Labor	Signs & Stripe	6,919		6,919
8VC17F	San Bernardino	26	E, A, Rd	E St. to State St. in Redlands	7.2	2/20/48	Geo. Herz & Co.	Grade, Pave & Bridge	778,309	72,661	850,970
1-8VC37	SBd, Riv	26, 77	E, A, Rd, C, A	Various Locations	23.4	6/9/49	G. & H. Paving Co.	Seal Coat	31,264	2,216	33,480
0-8VMC3	San Bernardino	26	Ont	Benson Ave. to San Antonio Ave.	1.2	7/9/48	Matich Bros.	Surfacing	51,552		51,552
8XMC1	San Bernardino	26	Ont	On "A" St.		6/19/47	Paul Gardner	Traffic Signals	24,743		24,743
8VC7	San Bernardino	26	Rdl	Bet. State St. & E. City Limits	2.8	12/21/45	Matich Bros.	Grading & P.C.C. Paving	317,522	22,126	339,648
8VC25	San Bernardino	31	B	Cajon Pass Hwy. near Blue Cut		6/10/48	Matich Bros.	Truck Scales	12,107	397	12,504
8VC8	San Bernardino	31	D	Bet. Victorville & Ora Grande Underpass	4.7	6/11/46	Geo. Herz & Co.	Repair with P.M.S.	41,131	2,673	43,804
14VC56	San Bernardino	31	H, J, K, L	28 to 70 Mi. E. of Barstow		5/28/48	Thomas Const. Co.	Redeck 13 Bridges	78,236	11,159	89,395
8V8	San Bernardino	31	J	Bet. Field & Summit		7/6/46	Day Labor	Experimental Blanket	6,951		6,951
1-14VC92	San Bernardino	31	K, L, N	6 Mi. W. of Baker to Mountain Pass		9/15/49	E. L. Thorsten	Redeck 15 Bridges	65,575	7,887	73,462
0-14VC68	San Bernardino	31	N, P	W. of Mountain Pass to S. of Nevada State Line		9/18/48	Thomas Const. Co.	Redeck 6 Bridges	38,808	7,956	46,764
0-8VC28	San Bernardino	31	Q, SBd	Grant Ave. to Highland Ave.	1.8	8/23/48	Geo. Herz & Co.	Surfacing	191,691	16,729	208,420

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
0-8VC30	San Bernardino	31	SBd	Mt. Vernon Ave. at Rialto Ave.	---	8/23/48	Ed Seymour.	Signals & Lighting.	\$10,987	\$679	\$11,666
8XC9	San Bernardino	43	A	Bet. 8.6 Mi. & 11.7 Mi. N. of San Bernardino	0.4	10/ 4/46	Geo. Herz & Co.	Widen & Surface with P.M.S.	48,831	2,662	51,493
8XC8	San Bernardino	43	B, C	Bet. Squirrel Inn & Big Bear Dam	13.8	6/28/46	R. R. Hensler	Road Mixed Surfacing & Seal Coat.	99,108	11,021	110,129
8XC10	San Bernardino	43	L	Bet. 1 Mi. E. of Victorville & Victorville.	1.4	3/ 6/47	Matich Bros.	Grade & Surface.	101,036	8,247	109,283
1-14VC91	San Bernardino	58	K, L	Amboy to Needles	---	8/25/49	E. S. & N. S. Johnson	Redeck 18 Bridges.	89,951	8,963	98,914
14VC50	San Bernardino	58	L	Across Teviot Cr.	---	4/ 1/48	L. H. Mulherron	R.C. Bridge.	16,880	3,130	20,010
0-14VC69	San Bernardino	58	N	4.0 to 0.5 Mi. W. of Jave	---	9/29/48	Covina Const. Co.	Redeck 6 Bridges	62,270	7,030	69,300
0-8VMC5-P	San Bernardino	58	N, Ned	"R" St. to Walnut St.	0.4	5/ 6/49	Ken Lowe.	Grade & Surface.	10,890	---	10,890
8VLC1	San Bernardino	58	P	Bet. 11 Mi. E. of Needles & Red Rock Bridge.	2.9	3/13/47	Arthur A. Johnson	Grade & Surface.	59,612	4,901	64,513
1-8VC40	San Bernardino	59	C	0.9 Mi. to 3.8 Mi. E. of Rte. 31.	2.9	6/22/49	Herz Paving Co.	Surface.	9,606	1,501	11,107
0-8VC29	San Bernardino	190	C	E. Base Line Ave. to Orange St.	1.6	9/24/48	Matich Bros. & E. L. Yeager	Grade, Surface & Structures.	392,491	29,702	422,193
14XLC7	San Bernardino	190	D	At Mill Cr.	---	6/21/46	Bent Construction	Bridge & Approaches	97,666	11,107	108,773
1-8VC38	San Bernardino	190	G	Erwin Lake to 1 Mi. E. Rte. 43	3.0	6/18/49	Geo. Herz & Co.	Bituminous Surface Treatment.	19,214	2,790	22,004
1-8VC35	San Bernardino	192	Upl	On Euclid Ave.	1.1	4/ 7/49	Matich Bros.	Resurfacing.	9,436	887	10,323
8X10	San Bernardino	207	A	Highland Ave. to City Creek Bridge	---	2/ 9/48	Day Labor	Erosion Control.	4,909	---	4,909
8XC14F	San Bernardino	207	A	City Creek Bridge to Plunge Creek	4.3	9/30/47	Westbrook & Pope	Grade, Surface, & Bridge.	778,043	85,615	863,658
8XC7	San Bernardino	207	A	Bet. Highland Ave. & City Cr. Bridge	3.2	5/16/46	Denni Investment Corp.	Grading, P.M.S., & Const. Br.	693,918	82,321	776,239
0-8VC18	San Bernardino	207	A	0.7 Mi. E. of Plunge Cr. to Long Point	1.8	4/ 1/48	Claude Fisher Co., Ltd. & L. R. & R. S. Crow	Grade & Surface.	736,756	77,928	814,684
8V35	San Bernardino	207	A	0.7 Mi. E. of Plunge Cr. to Long Point	1.8	9/13/48	Day Labor	Signs & Stripe.	5,350	---	5,350
8DC5	SBd, Riv.	FAS 695	---	See Riverside County	---	---	---	---	---	---	---

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
8DC7	San Bernardino	FAS 698	-----	Valley Blvd. to Foothill Blvd.-----	2.6	8/ 9/48	Matich Bros.-----	Grade & Surface.-----	\$141,142	\$11,457	\$152,599
8DC4	San Bernardino	FAS 706	-----	Bet. Riverside Ave. & Colton.-----	2.1	8/ 7/47	T. M. Page-----	Grade & Plant Mixed Surfacing.	55,350	6,047	59,397
8DC6	San Bernardino	FAS 711	-----	Waterman Ave. to 0.2 Mi. E. of City Cr.-----	4.5	3/28/48	E. L. Yeager-----	Grade, Surface & Bridge-----	229,884	23,723	253,607
8DC2	San Bernardino	FAS 712	-----	On Waterman Ave. Bet. Riverside-Redlands Rd. & Mill St.-----	2.7	4/ 8/47	Griffith Company-----	Grade, Surface, & 2 Bridges-----	380,790	15,451	396,241
8DC8	San Bernardino	FAS 714	-----	Pigeon Pass Rd.-----	8.4	1/ 7/49	Baich Bros. Const. Co. & Basich Bros.-----	Grade & Surface.-----	433,866	47,300	*481,166
-----	San Bernardino	-----	-----	Various Locations.-----	-----	-----	-----	Minor Contracts & D.L. Projects	53,736	-----	53,736
11VC12	San Diego	2	A	Bet. 9th St. & Luneta Dr. in Del Mar-----	0.6	9/13/46	V. R. Dennis Const. Co.-----	Widen with A.C.&P.M.S. Shldrs.	21,332	3,972	25,304
11VC16	San Diego	2, 12	A, B, ECj	In Del Mar, Solana Beach, Encinitas, Carlsbad, & El Cajon-----	-----	6/30/47	Tri-Cities Elec. Service-----	Traffic Signals & Lighting-----	54,570	3,872	58,442
11VC9	San Diego	2	B, C, D	Bet. Leucadia & San Mateo Cr.-----	6.2	5/29/46	N. M. Ball Sons-----	Repair with Imp. Base Matl. & P.M.S.-----	55,573	3,635	59,208
1-11VC45	San Diego	2	B, C	Bet. San Marcos Cr. & Carlsbad & Bet. Oceanside & Las Flores-----	4.3	5/13/49	R. P. Shea Co.-----	Surface-----	59,830	7,634	67,464
11VC11	San Diego	2	C	At Main Entrance to Camp Pendleton.-----	-----	7/22/46	Tri-Cities Elec. Service-----	Traffic Signal System-----	5,490	112	5,602
14GVC1	San Diego	2	C	Over A.T. & S.F. Ry. 1 Mi. N. of Oceanside-----	-----	12/28/45	Fred D. Kyle-----	Steel Overcrossing-----	85,806	12,168	97,974
11VC5	SD, Ora	2	D, Scl	Bet. Las Flores Cr. & San Clemente-----	9.5	9/20/45	N. M. Ball Sons-----	Grade & P.C.C. & A.C. Paving	678,642	59,617	738,259
14VC6	San Diego	2	D	Across San Mateo Cr., about 18 Mi. N. of Oceanside-----	-----	8/24/45	Oberg Bros.-----	R.C. Girder Bridge-----	140,199	14,629	154,828
11X27	San Diego	2	F	At Border Airport Curve, 2.5 Mi. N. of San Ysidro.-----	-----	5/ 3/46	Day Labor-----	Superelevate Curve-----	5,195	125	5,320
11X28	San Diego	2	F	Bet. 1.5 Mi. N. of San Ysidro & 2 Mi. S. of Obay-----	1.0	6/11/46	Day Labor-----	Experimental Surfacing-----	14,089	655	14,744

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
11XC11	San Diego	2, 199, 12	F. A. B., ECJ	Bet. San Ysidro & Chula Vista; Bet. Rte. 2 & Imperial Beach, & Bet. Grossmont & El Cajon.	9.3	5/20/46	R. E. Hazard Contr. Co.	Repair with Imp. Base Matl. & P.M.S.	\$111,306	\$5,541	\$116,847
11XC20	San Diego	2	ChV	Bet. S. City Limits & N. City Limits of Chula Vista	2.3	7/31/47	R. E. Hazard Contr. Co.	Plant Mixed Surfacing.	50,512	2,294	52,806
1-11VVC2-P	San Diego	2	ChV	National Ave. at "E" St. & 18th St.	---	8/29/49	Tri-Cities Elec. Service	Signals & Striping.	19,250	419	19,669
11V16	SD, Ora	2	Ocn C, D	Oceanside to San Clemente.	---	3/25/46	Day Labor	Signs & Stripe.	7,344	---	7,344
11VC7	San Diego	2	SCle Ocn, C	Bet. San Luis Rey River & 0.2 Mi. N. of Aliso Cr.	4.9	12/ 7/45	Basich Bros. Consts. Co. & Basich Bros.	Grading & P.C.C. Paving & Resurfacing Portions with A.C. Signals.	600,096 8,881 23,965	64,861 876 425	694,957 9,757 24,390
11VC29-P	San Diego	2	Ocn	Hill St. & Vista Way	---	6/10/48	Tri-Cities Elec. Service	Redeck Overpass	47,143	---	47,143
11VC23-P	San Diego	2	Ocn	Wisconsin Ave., 2d St., 3d St., & 6th St.	---	2/20/48	California Elec. Works	Grade, Pave, & Channelization	21,612	---	21,612
14VMC11	San Diego	2	S.D.	At Switzer Canyon Overpass near 10th St.	0.12	3/10/47	C. B. Tuttle Co.	Grade, Pave, & Channelization	45,593	---	45,593
11VMC11	San Diego	2	S.D.	On Pacific Hwy. at Balboa Ave.	2.5	12/ 8/47	R. E. Hazard Contr. Co.	Grade, I.B., & P.M.S.	11,287	---	11,287
11VMC7	San Diego	2	S.D.	From Tecolote Cr. to Balboa Ave.	---	4/ 6/48	California Elec. Works	Signals & Lighting	9,655	---	9,655
11VMC13-P	San Diego	2	S.D.	Pacific Hwy. at Balboa Ave.	---	3/ 4/48	Tri-Cities Elec. Service	Signals.	---	---	---
11VMC10-P	San Diego	2	S.D.	5th Ave. at Harbor Dr.	---	---	---	---	---	---	---
1-11VMC21	San Diego	2	S.D.	Miramar to Torrey Pines Grade.	2.4	4/29/50	R. E. Hazard Contr. Co., Inc.	Surface Shoulders	11,833	1,500	*13,333
1-11VVC4	San Diego	2	S.D.	At Jelllett St.	0.3	3/20/50	V. R. Dennis Const. Co.	Grade & Surface.	15,486	4,000	*19,486
11VC17	San Diego	12	A, L Msa, B, ECJ	Bet. San Diego & El Cajon.	2.9	7/31/47	Griffith Company	Plant Mixed Surfacing.	42,564	2,102	44,666
11V46	San Diego	12	D	Willows to Sweetwater River.	6.3	4/22/48	Prison Labor.	Grading	197,570	11,084	208,654
11V53	San Diego	12	D	Willows to Sweetwater	6.3	9/ 3/48	Prison Labor.	Grade	192,700	16,685	209,385
11V55	San Diego	12	D	Willows to Descanso Jct.	7.0	7/ 1/49	Prison Labor.	Grade	491,875	50,000	*541,875
1-14VC90	San Diego	12	D	Viejas Cr., 3 Mi. E. of Alpine	---	7/22/49	E. G. Ferham	Constr. Bridge	49,921	8,922	58,843
11VMC12-P	San Diego	12, 200	S.D.	College Ave. & El Cajon Blvd.—30th St. & Market St.	---	3/23/48	Els-Hokin & Galvan	Signals.	18,557	---	18,557
0-11VMC18	San Diego	12, 200	S.D.	Three Locations	5.9	10/19/48	Griffith Co.	Resurfacing.	230,531	---	230,531

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
11VC22-P	San Diego	12	S.D.	On Washington St. & on El Cajon Blvd.	---	2/20/48	Tri-Cities Elec. Service	Signals & Lighting	\$42,963	\$737	\$43,700
11GC3	San Diego	12 City St. City St.	S.D.	On Washington St., Normal St., & El Cajon Blvd.	1.1	9/ 8/47	Griffith Company	Grade, P.C.C. & P.M.S.	209,776	18,040	227,816
1-11VMC20	San Diego	12	S.D.	On Canyon St., Rosecrans St. to ½ Mi. W.	0.5	6/28/49	Pace Const. Co.	Resurface & Install Storm Drains	86,157	---	86,157
1-11VVC3-P	San Diego	12, 200	S.D.	On El Cajon Blvd. & on Market St.	---	11/ 4/49	Ets-Hokin & Galvan	Signals & Lighting	25,540	1,343	*26,883
0-11VC36	San Diego	77	A	N. of San Diego City Limits to Murphy Canyon Rd.	2.8	8/ 6/48	V. R. Dennis Const. Co.	Surfacing	38,384	---	---
0-11VC41	San Diego	77	A	San Diego to Miramar	6.5	11/10/48	R. E. Hazard Contr. Co., Inc., & C. G. Willis & Sons, Inc.	Grade	686,895	64,142	751,037
0-11VC30-P	San Diego	77	A, B	Miramar to Lake Hodges	12.0	6/16/48	Griffith Co.	Grade, Pave & Structure	1,648,368	114,378	1,762,746
11VC35	San Diego	77	B, Esd,	0.9 Mi. S. to 0.3 Mi. N. of Escondido. -	3.0	6/29/48	Griffith Co.	Grade, Surface & Bridges	607,181	69,811	676,992
0-11VC46	San Diego	77	B, Esd	15th Ave. to Grant Ave.	1.7	6/18/49	Jannoch Nurseries	Landscape	18,534	2,730	21,264
11X30	San Diego	77	F, G	Escondido to Sta. 380	---	8/30/46	Prison Labor	Grading	523,200	35,724	558,924
11XC21	San Diego	77	F, G F, G	Bet. Escondido & 3.4 Mi. S. of Riverside Co. Line	19.6	8/22/47	Morrison-Knudsen Co., Inc.	Plant Mixed Surfacing Grading & Drainage	208,724	14,459	223,183
11VC2	SD, Riv	77	F, G, A	Escondido to Murietta	6.0	7/ 1/48	Prison Labor	Grading	130,300	18,860	168,800
411X4	San Diego	77	G	S. Mossa Cr. to San Luis Rey River	1.5	6/30/41	Prison Labor	Grading	1,061,201	79,173	1,140,374
0-11VC38	San Diego	77	G	Riverside County Line to 3.4 Mi. S.	3.4	9/29/48	Peter Kiewit Sons Co.	Surfacing	68,453	3,846	72,299
14XC12	San Diego	77	G	At San Luis Rey River & Keyes Canyon Cr.	---	4/26/46	Spencer Webb	Two Steel Girder Bridges	169,111	18,594	187,705
0-11VVC1	San Diego	77	Esd	5th Ave. & Grand Ave.	---	6/28/49	Clinton Elec. Corp.	Signals & Lighting	18,589	1,443	19,932
14XC6	San Diego	77	S.D.	At Data St. Quince St., & Upas St.	12/ 5/45	12/ 5/45	M. H. Golden Const. Co.	R.C. Overcrossings	158,981	16,935	175,916
14XC7	San Diego	77	S.D.	Across San Diego River	12/13/45	12/13/45	Hawley Foster	R.C. Bridge	178,002	15,377	193,379
14XC9	San Diego	77	S.D.	On Hallock Pkwy. at Richmond St.	2/29/46	2/29/46	M. H. Golden Const. Co.	Street Crossing	60,178	9,974	70,152
14XC13	San Diego	77	S.D.	At Fair Rd.	6/25/46	6/25/46	Fred D. Kyle	Steel Girder Overcrossing	56,117	7,772	63,889
14XC16	San Diego	77	S.D.	Over Balboa Pkwy. at Pascoe St.	8/ 8/46	8/ 8/46	Carroll & Foster	R.C. Overcrossing	74,666	8,784	83,390
14XC17	San Diego	77	S.D.	On Balboa Pkwy. at 6th St.	---	8/ 8/46	M. H. Golden Const. Co.	R.C. Overcrossing	111,633	9,253	120,886

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
11XC10	San Diego	77	SD, A	Bet. 0.4 Mi. S. of Mission Valley Rd., & 0.5 Mi. N. of San Diego City Limits	4.1	5/15/46	Basich Bros. Const. Co. & Basich Bros.	Grading & P.C.C. Surfacing	1,121,774	\$102,836	1,224,610
11X43	San Diego	77	SD, A	"A" St. to 0.5 Mi. N. of San Diego City Limits	7.0	8/28/47	Day Labor	Traffic Signs	8,471		8,471
11XC9	San Diego	77	S.D.	Bet. "A" St. & 0.4 Mi. S. of Mission Valley Rd.	2.9	1/11/46	Mittry Bros. Const. Co. & Basich Bros. Const. Co.	Grading & P.C.C. Paving	1,384,011	122,945	1,506,956
11XC16	San Diego	77	S.D.	Bet. "A" St. & 0.4 Mi. S. of Mission Valley Rd.	2.9	4/21/47	Jannock Nurseries	Landscaping	72,369	6,739	79,108
14XC15	San Diego	77	S.D.	At University Ave.	6/25/46	6/25/46	M. H. Golden Const. Co.	R.C. Overcrossing	131,091	11,375	142,466
14XC14	San Diego	77	S.D.	At Mission Valley Rd.	6/26/46	6/26/46	M. H. Golden Const. Co.	Two R.C. Overcrossings	248,900	17,533	266,433
11XC19	San Diego	77	S.D.	Bet. 11th Ave. & "A" St. in San Diego	8/1/47	8/1/47	Tri-Cities Elec. Service	Signals & Lighting	9,507	721	10,228
1-11VC47	San Diego	77	S.D.	Cabrillo Freeway, "A" St. to Friar's Rd.	8/5/49	8/5/49	State Const. Co.	Lighting Highway	79,158	10,000	*89,158
14XC6	San Diego	78	A	Across Samagatuma & Descanso Creeks	5/16/46	5/16/46	Oberg & Cook	2 Bridges	88,860	8,520	97,380
1-14VC83	San Diego	78	A	Sweetwater River	4/14/49	4/14/49	Thomas Const. Co.	Const. Bridge & Approaches	65,376	8,316	73,692
11CX14	San Diego	78	B, C	Bet. 0.9 Mi. E. Santa Ysabel & 2.4 Mi. W. Julian	1.3	2/17/47	Clifford C. Bong & Co.	Grading & Surfacing	118,626	10,982	129,608
0-11VC37	San Diego	78	B, C	Julian to Santa Ysabel	1.5	9/1/48	E. C. Young & Co.	Grade & Surface	180,871	19,484	200,355
1-11VC43	San Diego	78, 198	C, H	Near Santa Ysabel & W. of Ramona	1.3	5/6/49	Clifford C. Bong & Co.	Grade & Surface	71,342	9,186	80,528
14XC10	San Diego	78	D, E	At Matagual Valley Cr., Canada Verde Cr. & Acorn Cr.	4/1/46	4/1/46	O'Rourke & Parker	R.C. Slab Bridges	40,214	4,699	44,913
14VC42	San Diego	78	D	Agua Caliente Cr. & Buena Vista Cr.	0.5	12/17/47	E. S. & N. S. Johnson	2 Bridges & Approaches	84,897	10,800	95,696
11VC19	San Diego	78, 195	E, C	Bet. 3.1 Mi. & 3.5 Mi. N. of San Luis Rey River & Bet. Colby Ranch & Rincon Store	1.1	12/30/47	Arthur A. Johnson	Grade & Bit. Surface Treat.	41,041	4,850	45,891
11V41	San Diego	195	B	Live Oak Creek	2/2/48	2/2/48	Day Labor	Grade Approaches	13,444	798	14,242
0-14VC89	San Diego	195	B	Live Oak Creek	6/29/48	6/29/48	E. G. Perlman	R.C. Bridge	18,569	3,455	22,022
14XC8	San Diego	197	B	Across Santa Ysabel Cr.	11/1/46	11/1/46	Spencer Webb	Bridge & Approaches	225,425	18,387	243,812
14VC48	San Diego	198	F	San Felipe Cr. E. of Julian	2/16/48	2/16/48	Walter H. Barber	Bridge & Approaches	89,936	9,446	99,382
14VC41	San Diego	198	ECJ	At Wright St. Cr. in El Cajon	12/11/47	12/11/47	Johnson-Western Co.	R.C. Culvert	16,039	2,128	18,167

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
11VC25	San Diego	199	A	At National Ave. & Palm Ave.	---	3/22/48	Eis-Hokin & Galvan	Signals	\$5,013	\$338	\$5,351
0-11VMC19-P	San Diego	199	Cord	On Orange Ave.	1.5	10/19/48	R. E. Hazard Const. Co.	Resurfacing	64,059	---	64,059
14XLC9	San Diego	200	B	At Dulzura Cr. about 5 Mi. S. of Jamul	0.3	4/10/47	Griffith Company	Bridge & Approaches	76,748	6,454	83,202
11V54	San Diego	200	C	Cottonwood Creek	---	12/17/48	Day Labor	Fill	7,416	26	7,442
14XLC5	San Diego	200	D	At Campo Cr. about 6 Mi. W. of Campo	---	12/21/45	Walter H. Barber	Steel Bridge & Approaches	81,318	9,227	90,545
11VC24P	San Diego	200	SD	Euclid Ave. & Federal Blvd.	---	3/11/48	California Elec. Works	Signals	9,950	860	10,810
11DC1-P	San Diego	FAS 732, 732, 12	LMsa	Fairmont Extension to Route 12	5.0	9/27/48	Daley Corp.	Grade, Pave & Structure	818,476	82,536	901,012
11DC4-P	San Diego	FAS 732	---	On Mission Valley Road	---	11/ 7/49	Griffith Co.	Const. Culvert	37,197	4,800	*41,997
4TC4	San Diego	---	---	Various Locations	---	---	---	Minor Contracts & D.L. Projects	57,934	---	57,934
14TC1	San Francisco	2	S.F.	Alemany Blvd. Bet. Mission St. & Sta. 36	---	5/12/47	State's Share of Cost	Grade & Pave	98,000	---	98,000
15T3	San Francisco	2	S.F.	Bridge Over Presidio of San Francisco	---	11/ 6/46	R. W. Reade & Co.	Clean & Paint Approach Bridge	41,615	---	41,615
15T5	San Francisco	68, 5	SF-Oak	San Francisco-Oakland Bay Bridge	---	7/19/45	Day Labor	Insurance	130,410	---	130,410
1-15TC3	San Francisco	68, 5	SF-Oak	San Francisco-Oakland Bay Bridge	---	8/10/48	Healy Tibbitts Construction Co.	Maintenance and Operation	1,180,846	---	1,180,846
---	San Francisco	68	S.F.	San Francisco-Oakland Bay Bridge	---	8/25/49	Healy Tibbitts Construction Co.	Repair Fender	14,904	---	*14,904
---	San Francisco	---	---	Various Locations	---	---	---	Minor Contracts & D.L. Projects	1,345	---	1,345
14TC21	S.J. Sta	4	A, B	See Stanislaus County	---	6/22/46	Fredrickson & Watson Const. Co.	Grade, P.C.C. Pvt. & 3 Bridges	813,602	65,547	879,149
10TC15	S.J. Sta	4	A, B, Rip	See Stanislaus County	---	8/28/47	F. Kaus	Barrier Posts	25,170	4,353	29,523
10TC24	S.J. Sta	4	A, B, Rip	See Stanislaus County	---	---	---	---	---	---	---
10TC14	San Joaquin	4	C	Bet. Calaveras River & Lodi	8.2	---	---	---	---	---	---
10TC23	San Joaquin	4	C	Bet. Calaveras River & Lodi	---	---	---	---	---	---	---
0-10TMC6P	San Joaquin	4	C, Lodi	Cherokee Lane at Lodi Ave., Pine St. & Victor Rd.	---	8/ 3/48	Eis-Hokin & Galvan	Signals	9,695	---	9,695
1-10TC52	San Joaquin	4	C	Calaveras River to Lodi	6.9	7/ 7/49	Claude C. Wood Co.	Crossovers	31,198	3,532	34,730

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
10TL2	San Joaquin---	4	E	At Little John Cr. & S. Br. of Little John Cr. Br. No. 29-17, 18		9/21/44	Day Labor	Bridge Repair	\$10,476	\$746	\$11,222
10TL4	San Joaquin---	4	E	At French Camp Slough & Lone Tree Slough Overflow Brs. No. 29-19, 20		10/16/44	Day Labor	Repairs	10,400	749	11,149
10TL5	San Joaquin---	4	E	At Lone Tree Slough Overflows, Br. No. 29-21, 22		11/24/44	Day Labor	Replace Abutments	10,782	743	11,525
10TC25F	San Joaquin---	4, 5	E, Siken, C	Two Locations	6.3	12/ 4/47	Lord & Bishop & M.J.B. Const. Co.	Grade, Pave & Structures	1,463,373	150,000	*1,613,373
1-10TMC9	San Joaquin---	4, 24	Lod, C Lod	Lockeford St. to 0.1 Mi. North of Lodi City Limits, & Cherokee Lane to 0.3 Mi. East	0.6	7/20/49	Claude C. Wood Co.	Widening & Resurfacing	53,999		53,999
1-10TC46	S.J. Sta.---	4	Rip, C	See Stanislaus County							
10TC12	San Joaquin---	5	A, Tra	Bet. Byron Rd. & Banta Rd.	5.5	5/ 6/46	M. J. Ruddy & Son	Rock Base & Plant Mixed Surfacing	137,462	11,347	148,809
10TC10	San Joaquin---	5	B	Bet. Grant Line Rd. & Mossdale	3.8	1/22/46	M.J.B. Construction Co.	Grading & P.C.C. Paving	396,325	45,040	441,365
14TC10	San Joaquin---	5	B	Across Paradise Cut & Paradise Cut Overflow		1/28/46	Stockton Const. Co.	Steel Bridge & R.C. Bridge	114,333	13,563	127,896
14TC17	San Joaquin---	5	B	Across San Joaquin River at Mossdale		11/22/46	Lord & Bishop	Bridge Substructure	257,449	13,423	270,872
14TC25-F	San Joaquin---	5	B	San Joaquin Riv. at Mossdale		9/22/47	Judson-Pacific-Murphy Corp.	Bridge Superstructure	436,578	34,360	470,938
10TMC2	San Joaquin---	5	Tra	On 11th St., Bet. N. "P" St. & Central Ave.		10/ 2/47	Charles I. Cunningham	Paving with Portland Cem. Con.	2,313		2,313
10TC30P	San Joaquin---	5	Tra	Between East St. & Roosevelt Ave.		4/ 9/48	Parker Electric	Signals	13,499		13,499
1-10TC43	San Joaquin---	41	A	S'tly Boundary to Rte. 5	8.3	4/ 1/49	M. J. Ruddy & Son	Base & Seal Coat	125,306	3,653	128,959
1-10TC62	San Joaquin---	53	C	Potato Slough		4/ 1/49	R. G. Clifford	Reconstruct Bridge	55,081	4,548	59,629
51-10TC5	San Joaquin---	53	C	4 Mi. E. of Terminus	0.3	4/15/50	Claude C. Wood Co.	Grade & Surface	23,216	3,560	*26,776
1-10TC47	San Joaquin---	66	B	Brennan Road to Easterly Boundary	5.2	4/12/49	Granite Const. Co.	Surface	88,379	11,795	100,174
0-14TC56	San Joaquin---	75	A	Old & Middle Rivers		12/ 6/48	Lew Jones Const. Co.	Redeck 2 Bridges	64,785	5,647	70,432
10WC15	San Joaquin---	75	A	Bet. Middle River & Hot	4.4	4/22/47	M.J.B. Construction Co.	Plant Mixed Surfacing	97,071	101,162	
1-10TC51	San Joaquin---	75	A	Old River to Middle River	4.3	6/15/49	M.J. Ruddy & Son	Surface	108,634	7,000	*115,634
10W43	San Joaquin---	75	B	Bet. Beginning of Section & Hewitt Rd.	12.1	8/19/46	Day Labor	Patching & Seal Coat	21,525	1,277	22,802

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
1-10TC37	San Joaquin	75	Stkn	French Camp Turnpike to El Dorado St.	0.2	9/15/49	A. Teichert & Son, Inc.	Grade & Surface	\$52,161	\$3,134	\$55,295
14WLC48	San Joaquin	97	A	Across Calaveras River	0.4	3/13/47	Elmer J. Warner	Grade, Surface & Bridges	72,166	7,142	79,308
14AN2	San Joaquin	Access		At S.P. & W.P.R.R. Crossing on JX & Lathrop Rds.		3/12/45	Day Labor	Install Flashing Light Signals	12,849		12,849
14DC47	S.J., Sac	FAS 540		Mokelumne River		1/ 7/49	Lord & Bishop	Bridge & Approaches	264,612	20,000	*284,612
10DC9	San Joaquin	FAS 540		Thornton Road	0.8	10/ 5/49	M.J.B. Const. Co.	Grade & Surface	70,875	7,500	*78,375
14DC13	San Joaquin	FAS 901		Across Mokelumne River		4/23/47	A. A. Edmondson & A. L. Miller	Steel R.C. Bridge	164,234	2,437	166,670
10DC5	San Joaquin	FAS 901		Davis Road to Bender Road	0.8	8/30/48	Claude C. Wood Co.	Grade & Surface	50,520	3,996	54,516
	San Joaquin			Various Locations				Minor Contracts & D.L. Projects	26,698	500	27,198
5V18	San Luis Obispo	2	D	Near Santa Margarita		4/ 5/48	Day Labor	Truck Scales	15,420		15,420
5VC14F	San Luis Obispo	2	D	San Luis Obispo to Cuesta Grade	2.7	6/20/47	Fredericksen & Kasler	Grade & Surface	736,207	49,407	785,614
5VC15F	San Luis Obispo	2	E, SLO	Miles Station to Marsh St.	6.6	11/ 4/47	Fredericksen & Kasler	Grade & Surface	1,405,015	92,559	1,497,574
1-5VVC2	San Luis Obispo	2	E	At Santa Fe Bridge		11/29/49	Gallagher & Ochs	Highway Lighting	2,396	675	*3,071
0-5VC16	San Luis Obispo	2	F	Deleissigues Cr. & Russel Turn	2.3	4/ 1/48	Madonna Const. Co.	Grade & Surface	126,573	7,265	133,838
5VC13	SLO, SB	2	F, C	See Santa Barbara County							
5V9	San Luis Obispo	2	F, E	Bet. Nipomo & Pismo Beach	4.0	4/13/46	Day Labor	Stabilize & Raise Shldrs.	5,674	62	5,736
5VC7	San Luis Obispo	2	F	Bet. Santa Maria River & 1.5 Mi. S. of Nipomo	2.1	6/11/46	Fahey-Hammond, Inc.	Plant Mixed Surfacing	102,962	5,865	108,847
5V43	San Luis Obispo	2	P&R, A	North City Limits to 1,300' north		9/ 7/48	Day Labor	Improve 2 Curves	5,917		5,917
5VC19-F	San Luis Obispo	2	P&Bh, E	Bet. Pismo Beach & Miles Station	4.9	4/29/48	Fredericksen & Kasler	Grade, Surface & Bridge	1,041,415	87,825	1,129,240
5VC17	San Luis Obispo	2	SLO	At Marsh & Higuera St.		4/ 6/48	L. H. Leonardi Elec. Const. Co.	Signals	15,669	619	16,288

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
1-5VC31	San Luis Obispo	2	SLO, S.B	See Santa Barbara County							
1-5VC29	San Luis Obispo	33, 125	C, D	Cholame to Kern Co. Line-----	4.0	5/10/49	Valley Paving & Const. Co., Inc.	Resurface-----	\$132,880	\$19,105	\$151,985
14XLC10	San Luis Obispo	33	D	Across Santa Rosa Cr. 9 Mi. E. of Cambria-----		6/18/47	E. G. Perham	R.C. Bridge-----	16,675	2,898	19,573
0-14YC52	San Luis Obispo	33	E	Across Rocky Cr. East of Cambria-----		4/22/48	D. M. Filburn	R.C. Bridge-----	15,482	2,011	17,493
5X17	San Luis Obispo	56	A	Bet. Arroyo de la Cruz & San Carpó Cr.	3.9	3/20/47	Day Labor	Resurfacing-----	13,963	319	14,282
0-5YC23	San Luis Obispo	56	D	San Luisito Cr. & San Bernardo Cr.	0.2	8/16/48	O. R. Ochs & Son	2 Culverts & Approaches-----	37,776	4,088	41,864
14XLC11	San Luis Obispo	56	E	Across Villa Cr.		6/24/47	E. G. Perham	R.C. Slab Bridge-----	27,541	3,707	31,248
5XL8	San Luis Obispo	57	B	At Gifford Cattlepass-----		4/ 9/46	Day Labor	R.C. Bridge-----	8,636	27	8,663
0-14YC58	San Luis Obispo	125	B	Salinas River-----		6/18/48	O. R. Ochs & Son	Redeck Bridge-----	15,106	3,017	18,123
5DC3	San Luis Obispo	FAS 678		Route 56 to ½ Mi. W. of Los Osos Creek-----	3.1	3/11/48	Madonna Const. Co.	Grade & Imported Borrow-----	58,363	8,820	67,183
5DC9	San Luis Obispo	FAS 679		On Avila Rd., Ontario Hot Springs to Avila-----	2.5	11/14/49	Granite Const. Co.	Grade & Surface-----	116,252	18,000	*134,252
5DC2	San Luis Obispo	FAS 683		On Oso Flaco-Nipomo Rd., Bet. S.P.R.R. & 3.2 Mi. Easterly-----	3.2	4/11/47	A. Madonna	Bit. Surface Treatment-----	63,407	6,071	69,478
5DC7	San Luis Obispo	FAS 1085		Rte. 2 to E. of Estrella-----	4.2	4/20/49	Eaton & Smith	Grade-----	64,005	6,979	70,984
5DC1	San Luis Obispo	FAS 1086		Bet. State Rte. 137 & Rinconada-Las Plitas Rd.	6.0	3/28/47	Nathan A. Moore	Grade & Imp. Base Material-----	50,408	3,633	54,341
5DC4	San Luis Obispo	FAS 1086		Rte. 137 to Rinconada-Las Plitas Rd.	6.1	6/ 7/48	Ned H. Mullenbaux	Bit. Surf. Tr. & Pen. Tr.	15,802	1,464	17,266
-----	San Luis Obispo			Various Locations-----				Minor Contracts & D.L. Projects-----	30,155	-----	30,155

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
4TM4	San Mateo	2	A	At Hillcrest Blvd.	---	10/22/46	Day Labor	Traffic Signals	\$6,339	\$500	\$6,839
4TM5	San Mateo	2	A, Burl	On El Camino Real, Bet. Rosedale Ave. & Primrose Rd.	---	8/7/47	Severin Electric Co.	Traffic Signals	39,617	---	39,617
4TC52	San Mateo	2	A	Junipero Serra Blvd. & Santa Ynez Ave.	---	4/29/48	Jensen & Pitts	Signals & Channelization	37,965	6,766	44,731
0-4TMC12-P	San Mateo	2	Burl, SM	Peninsular Ave. to Hillsdale Blvd.	---	9/13/48	Geo. Pollock Co.	Signals	54,924	---	54,924
4TC55	San Mateo	56	A	At Whitehouse Cr. & at Gazos Creek	0.2	5/13/48	Gordon L. Carps	Grade, Surface, & Bridges	44,608	9,601	54,209
4WC30	SM, SCR	56	A, C	See Santa Cruz County	---	---	---	---	---	---	---
0-4RTC1	SM, SCR	56	A, C	See Santa Cruz County	---	---	---	---	---	---	---
1-4TC87	San Mateo	56	A	Cypress Creek 0.6 Mi. N. Santa Cruz-San Mateo County Line	0.3	6/7/49	Granite Const. Co.	Grade & Surface	31,259	5,300	*36,559
0-4TC81	San Mateo	56	C, D	Half Moon Bay to Montara Creek	5.0	4/14/49	A. Teichert & Son, Inc.	Grade & Surface	395,891	65,000	*460,891
4TC36	San Mateo	68	A	At Geneva Ave. & near Visitation Ave.	0.6	5/16/47	Chas. L. Harney, Inc.	Signals & Channelization	78,987	8,964	87,951
4TC32	San Mateo	68	B	At San Bruno Ave.	---	3/27/46	Day Labor	Traffic Signals	4,244	---	4,244
4TC55	San Mateo	68	B	At Main Entrance to S.F. Municipal Airport	---	1/30/47	Day Labor	Traffic Signals	19,391	947	20,338
4TC35	San Mateo	68	B	At Millbrae Ave.	---	6/26/46	Day Labor	Signal System	4,714	---	4,714
4TC36	San Mateo	68	C	At Holly St.	---	6/21/46	Day Labor	Traffic Signals	5,545	---	5,545
4TC88	San Mateo	68	D	Willow Road	---	1/19/48	Day Labor	Signals & Channelization	10,240	667	10,907
14TC19	San Mateo	68	F, Burl	On Bayshore Freeway, Bet. South San Francisco & Burlingame	---	2/28/47	Carrico & Gautier	Substructures for 4 Overcrossings	397,057	32,594	429,551
14TC24-F	San Mateo	68	F, Burl	South San Francisco to Burlingame	---	8/7/47	Carrico & Gautier	4 Overpass Superstructures	983,375	54,715	1,038,090
4TC38	San Mateo	68	Bmt	At Ralston Ave.	---	8/13/46	Day Labor	Traffic Signals	6,534	413	6,947
4TC24	San Mateo	68	Burl, SM	Bet. Broadway in Burlingame to State St. in San Mateo	2.2	6/22/46	Guy F. Atkinson Co.	Grade & Pave with P.C.C. on C.R.B.	672,385	72,264	744,639
4TC46	San Mateo	68	Burl, SM	Broadway in Burlingame to Peninsular Ave. in San Mateo	2.0	2/13/48	Huetting & Schromm	Landscaping	8,517	2,348	10,865
4TC30	San Mateo	68	SM	At Third Ave.	---	12/31/45	Day Labor	Revise Signal System	6,519	---	6,519
14TC9	San Mateo	68	SM	On Bayshore Freeway at Peninsular Ave.	---	1/22/46	Macco Const. Co.	Steel Overcrossing	258,917	22,410	281,327
0-4TMC11-P	San Mateo	68	SM	Peninsular Ave. to Poplar Ave.	0.4	8/24/48	L. C. Smith	Grade & Bit. Surf. Tr.	20,410	2,950	*23,360

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
4T74	San Mateo	68	SSF	San Francisco to Burlingame		9/10/47	Day Labor	Signals	\$21,165	\$1,143	\$22,308
4TC12-F	San Mateo	68	SSF	N.C.L. of South San Francisco to S. of Colma Creek	2.1	8/21/47	Guy F. Atkinson Co.	Paving	1,038,157	120,000	*1,158,157
4TC53	San Mateo	68	SSF, F, Burl	Colma Cr. in S.S.F. to Broadway in Burlingame	4.9	5/ 5/48	Frank W. Smith	Armor Coat	17,491	3,311	20,802
4T94	San Mateo	68	SSF, F, Burl	South San Francisco Underpass to Broadway in Burlingame		2/24/48	Day Labor	Restore Grade	7,133		7,133
14TC23-F	San Mateo	68	SSF	At Main Line & Belt Line R.R. in S.S.F.		6/27/47	J. H. Pomeroy & Co., Inc.	2 Overpass Superstructures	644,086	23,798	667,884
14TC20-F	San Mateo	68	SSF	In South San Francisco		4/11/47	Harry J. Oser & Peter Sorenson	5 Structures	436,542	41,400	*477,942
4TC26	San Mateo	68	SSF	Bet. S.P.R.R. & 0.5 Mi. Southerly	0.5	6/25/46	Piombo Bros. & Co.	Grade & Construct Sand Drains	201,553	24,697	226,255
4TC30	San Mateo	68	SSF, F, Burl	Bet. Colma Cr. in South San Francisco & Broadway in Burlingame	5.1	10/ 9/46	Macao Corp. & Morrison-Knudsen Co., Inc.	Grading & Paving	2,843,212	178,436	3,021,648
4T81	San Mateo	68	SSF, F Burl	Colma Creek to Broadway in Burlingame	4.9	4/29/48	Day Labor	Signs & Stripe	19,785		19,785
4WL6	San Mateo	105	A	At Pilarcitos Bridge, No. 35-15		2/21/47	Day Labor	Bridge Repairs	4,895	213	5,108
0-4TC65	San Mateo	105	A	3 Mi. E. to Half Moon Bay	2.7	7/28/48	L. C. Smith	Surfacing	87,812	12,783	100,595
4DC7	San Mateo	FAS 1048		2.5 Mi. N. of Woodside to Ralston Ave.	4.7	6/30/47	Edward Keeble	Grade & Surface	248,414	18,155	266,569
4DC2	San Mateo	FAS 1052		On Whipple Rd., Bet. Canada Rd. & Alameda de las Pulgas	2.9	8/ 8/46	Piombo Bros. & Co.	Grading	158,435	1,587	160,022
0-4TTC5-P	SM, Ala.	Var	Var	See Alameda County				Minor Contracts & D.L. Projects	39,812		39,812
5VC13	San Mateo			Various Locations							
5VC13	S.B., SLO	2	C, F	Bet. Zaca & Wignome & Bet. 1.5 Mi. S. of Nipomo & Delaigues Cr.	3.9	5/ 7/47	Brown & Doko	Plant Mixed Surfacing	118,797	5,582	124,379
5Y10	Santa Barbara	2	C, M, L	Bet. Zaca & Santa Maria (Portions)	9.8	4/13/46	Day Labor	Stabilize & Raise Shldr.	16,297	141	16,438
0-5VC18-F	Santa Barbara	2	D	Santa Ynez River to Jonata Park	3.6	4/ 9/48	Dimmit & Taylor & T. M. Page	Grade & Surfacing	532,023	86,421	618,444

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14VC36-PP 1-5VC33	Santa Barbara Santa Barbara	2 2	D D	Nojiqui Cr. & Santa Ynez River In Buellton	0.2	10/ 8/47 11/10/49	C. B. Tuttle Co. Valley Paying & Const. Co., Inc.	2 Bridges	\$516,334	\$25,942	\$542,276
1-5VC31	S.B., SLO	2	D, E, SLO	Santa Inez River to Jonata Park & Miles Sta. to Marsh St.	9.9	8/31/49	Madonna Const. Co.	Grade & Pave.	8,786	2,530	*11,316
5V44	Santa Barbara	2	D	Nojiqui River to Santa Ynez River	0.35	5/24/49	Day Labor	Seal Coat	23,877 4,767	1,392	25,269 *4,767
5V8 0-5VC25	Santa Barbara Santa Barbara	2 2	F F	Bet. El Capitan Cr. & Alcatraz Bet. Arroyo Quemado & Arroyo Hondo	0.6 2.6	4/ 6/46 9/27/48	Day Labor Clyde W. Wood Inc.	Plant Mixed Surfacing Grade, Surface & Culverts	8,998 698,367	61 75,000	9,059 *743,367
5VC9	Santa Barbara	2	G	Bet. 1/4 Mi. E. of Las Varas Cr. & 1/4 Mi. E. of El Capitan Cr.	2.9	10/28/46	N. M. Ball Sons	Grading & Surfacing	400,589	35,474	436,063
5VC11 0-5VC24	Santa Barbara Santa Barbara	2 2	J J	Bet. Sheffield Dr. & San Ysidro Rd. Sheffield Dr. to San Ysidro Rd.	1.3 1.1	4/ 1/47 9/15/48	N. M. Ball Sons Baker & Pollock	Grading & Surfacing Grade, Surface, & 4 Bridges	356,842 136,816	47,674 19,500	404,516 *156,316
1-5VC28	Santa Barbara	2	L, A	Orcutt Wye to Santa Maria	2.0	6/30/49	Madonna Const. Co.	Grade & Surface	203,626	45,000	*248,626
5VC10	Santa Barbara	2	P	At Hollister Wye, Bet. Santa Barbara & Goleta		12/ 2/46	L. H. Leonardi Elect. Const. Co.	Signal Systems	19,312	922	20,234
5VC8	Santa Barbara	2	P, Q	At Hollister Wye, Bet. Santa Barbara & Goleta		6/27/46	Jesse S. Smith	Grading & Plant Mixed Surfacing	142,320	23,396	165,716
5VC5	Santa Barbara	2	Q, G	Bet. Fairview Ave. & Teclote Cr.	4.7	10/ 3/45	Dimmitt & Taylor	Grading & Plant Mixed Surfacing	503,927	60,855	564,782
5VC6	Santa Barbara	2	Q	Bet. 0.25 Mi. W. of Rte. 80 & Fairview Ave.	3.7	1/ 7/46	Dimmitt & Taylor	Grading, P.M.S. & 2 Bridges	524,215	49,092	574,207
5VC21	Santa Barbara	2	Q, G	Hollister Wye to Teclote Cr.	8.4	6/ 7/48	Baker & Pollock	Resurfacing	47,041	3,249	50,290
14VC27 14VC24-F 5VC12-F	Santa Barbara Santa Barbara Santa Barbara	2 2 2	SB SB SB	At Salinas St. S.P.R.R. at Salinas St. 0.2 Mi. E. of Park Pl. to Ranchera St.		3/ 6/47 8/21/47 9/16/47	Maesa Corporation Carl N. Swenson Co., Inc. N. M. Ball Sons	Overhead Substructure Overcrossing Grade, Surface, & Bridge	229,644 520,435 889,688	20,249 22,062 83,242	249,893 542,497 972,930
0-5VC20	Santa Barbara	56	A	Las Cruces to San Julian Cr.	6.5	5/25/48	N. M. Ball Sons	Grade & Bit. Surf. Tr.	164,642	17,447	182,089
1-5VC27-P	Santa Barbara	56	B	Jalama Rd. to Rte. 149	4.3	4/20/49	Rand Const. Co., Inc.	Grade & Surface	293,365	52,000	*345,365
5DVC1-P	Santa Barbara	56	E	Black Rd. to Point Sal Rd.	5.5	3/16/48	Madonna Const. Co.	Grade, Surface & Structure	209,371	48,277	257,648
0-5VC30-P	Santa Barbara	148	SMra	Railroad Ave. to W.C.L. of Santa Maria	0.5	6/22/49	Madonna Const. Co.	Grade & Surface	57,794	10,000	*67,794

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
5X16	Santa Barbara	149	D	Bet. Mi. 0.00 & Mi. 2.60	2.6	3/20/47	Day Labor	Resurfacing	\$9,838	\$239	\$10,077
5DXC1	Santa Barbara	149	D	Bet. 2.6 Mi. E. of Buellion & Grand Ave.	2.3	4/29/47	Frank T. Hickey, Inc.	Grading & P.M.S.	119,741	18,538	138,279
	Santa Barbara			Various Locations				Minor Contracts & D.L. Projects	51,850		51,850
4TC58-P	Santa Clara	2	A, MVw	San Antonio Ave. to Saratoga Rd.	1.5	6/10/48	A. J. Raisch Paving Co.	Grade, Surface & Signals	235,143	23,637	258,780
4T131	Santa Clara	2	A	Palo Alto to Sunnyvale	5.8	3/10/50	Day Labor	Subsiding	13,952		*13,952
1-4TC74	Santa Clara	2	B	Ford Rd. to Morgan Hill	6.1	4/1/49	McGillivray Const. Co.	Resurface	105,919	20,000	*125,919
4T59	Santa Clara	2		0.5 Mi. N. of Coyote		3/31/47	Day Labor	Install Truck Scales	9,961		9,961
1-4TC72	Santa Clara	2	C	Cornadero Cr. 1.8 Mi. S. of Gilroy		7/12/49	Dan Caputo	Construct R.C. Bridge	85,218	7,667	92,885
14TC2	Santa Clara	2	E	At Ford Rd. about 6 Mi. S. of San Jose		12/17/45	Earl W. Heple	Steel Undercrossing	59,621	10,837	70,458
14TC3	Santa Clara	2	E	At Coyote Cr. & Coyote Rd., about 6 Mi. S. of San Jose		12/4/45	Earl W. Heple	Steel Bridge & Undercrossing	265,690	20,594	286,284
	Santa Clara	2	Gil	In Gilroy		3/4/48	Day Labor	Signals	8,537	4,700	13,237
1-4TTC9	Santa Clara	2	MgH	At Monterey St. & 2d St.		7/22/49	Howard Electric Co.	Signals	9,619	2,500	*12,119
4T58	Santa Clara	2	MgH	Through Morgan Hill	1.0	3/20/47	Day Labor	Resurfacing	8,964	323	9,287
4TC20	Santa Clara	2	SJs, E	Bet. San Jose & 0.6 Mi. S. of Ford Rd.	8.1	12/20/45	N. M. Ball Sons	Grade & P.C.C. Paving	1,281,376	104,853	1,386,229
0-4TTC6-P	Santa Clara	2	SC1	Bellomy St.		1/7/49	L. H. Leonardi Electric Const. Co.	Signals & Lighting	11,988	853	12,841
0-4TTC8-P	Santa Clara	2	SC1	Intersection Clay St. with LaFayette St. & Grant with Franklin		6/15/49	Severin Electric Co.	Signals & Lights	15,836	1,313	*17,149
4TC37	Santa Clara	5	A	Bet. Alameda County Line & Milpitas	1.0	5/16/47	A. S. Jones	A.C. Surface & Cr. Run Base	45,527	7,028	52,555
4T47	Santa Clara	5	B	At Bascom Ave. & Race St.		11/21/46	Day Labor	Traffic Signals	15,692	915	16,607
4TC28	Santa Clara	5	B, SJs	At Bascom Ave. & Park Ave.	1.3	7/10/46	Union Paving Co.	Grade & Pave	181,888	36,214	218,102
4T57	Santa Clara	5, 68	A, B	At Intersection of Oakland Rd. & Bayshore Hwy.		3/4/47	Day Labor	Traffic Signals	8,555	517	9,072
4T113	Santa Clara	32	A	Furlong Creek		9/8/48	Day Labor	Detour	6,359		6,359
0-4TTC34	Santa Clara	32	A	Furlong Creek		9/29/48	Dan Caputo	R.C. Bridge	6,709	1,376	8,085
4WC28	Santa Clara	32	C	About 1.25 Mi. W. of Merced Co. Line	0.1	4/29/47	Granite Const. Co.	Grade & Surface	11,532	1,818	13,350

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
1-4TC93	Santa Clara	42	A	Bet. 0.3 Mi. S. of Saratoga Ave. in Saratoga & 1 Mi. S.	0.7	9/29/49	Dan Caputo & Ed Keeble.	Grade & Surface	\$69,699	\$21,000	*\$90,699
4TR2	Santa Clara	68	B, SJs	At McKee Rd.		4/17/47	Day Labor	Signals & Lights	7,483	339	7,822
4TR6	Santa Clara	68	B	Acnew Rd.		3/ 3/48	Day Labor	Signals & Lighting	9,331	646	9,977
0-4TC02	Santa Clara	68	B, SJs	Gish Rd. to Rte 5	0.5	6/18/48	Chas. L. Harney, Inc.	Resurfacing	69,516	6,123	75,639
4TC32	Santa Clara	68, 2	SJs	At Santa Clara St. Underpass in San Jose.	0.5	2/ 6/47	Huetfig & Schronm.	Landscaping	15,507	1,834	17,341
14TC11	Santa Clara	68, 2	SJs	On Bayshore Freeway at Santa Clara St.		4/ 1/46	Fredrickson & Watson Construction Co.	Separation Structure & Apprs.	402,703	49,770	452,473
4T37	Santa Clara	68, 2	SJs	On Bayshore Freeway at Santa Clara St.		7/ 6/46	Day Labor	Maintain Detour	7,280		7,280
14TT154	Santa Clara	115	A	White Rd. & Alum Rock Ave.		12/30/48	Day Labor	Signals & Lights	5,994	340	*6,334
4DC3	Santa Clara	FAS		On Leavesley & Ferguson Rds.	4.5	9/20/46	Granite Const. Co.	Grading and A.C. Paving	162,073	20,138	182,211
4DC4	Santa Clara	FAS		On Stevens Cr. Rd.	0.4	12/30/47	Dan Caputo & Edward Keeble.	Grading & Paving	59,555	5,705	65,300
4DC8	Santa Clara	FAS		On San Jose-Stevens Cr. Rd.	3.5	8/29/47	A. J. Raisch Paving Co.	Grade, P.M.S. & Widen 2 Bridges	192,255	23,500	215,755
4DC13	Santa Clara	FAS		On Story Road Bet. McLaughlin & White Road.	2.5	2/10/49	Leo F. Piazza	Grade & Surface	75,759	11,284	87,043
4DC5	Santa Clara	FAS		On N. Fourth St., Bet. Rte. 68 & San Jose.	1.2	3/11/47	Piazza & Hundley	Grade & Pave	60,535	5,961	66,496
	Santa Clara			Various Locations				Minor Contracts & D.L. Projects	27,809		27,809
4T118	Santa Cruz	56	A, E, SCr	Arana Gulch		6/15/49	Day Labor	Grade & Surface	15,000		15,000
4WC30	SCr, SM	56	C, A	Waddell Creek to Finney Creek	1.4	6/13/47	Eaton & Smith	Grade & Surfacing	444,314	51,325	495,639
0-4RTC1	SCr, SM	56	C, A	Waddell Creek to Finney Creek	1.3	1/21/49	Underground Const. Co.	Pipe Line	28,432	2,078	30,510
14WLC42	Santa Cruz	56	C	At Waddell Cr.	0.3	9/16/46	Granite Const. Co.	Bridge & Approaches	84,426	8,237	92,663
4TC45-F	Santa Cruz	56	D, E, SCr	Rob Roy Junction to Morrissey Ave.	7.7	10/16/47	Earl W. Heple	Grade & Structures	1,448,177	100,000	*1,608,177
0-4TC47-F	Santa Cruz	56	D, E, SCr	Bet. Rob Roy Jct. & Morrissey Ave.	7.7	4/ 1/48	N. M. Ball Sons	Grade & Surface	1,239,444	142,500	1,381,944
0-4TC71	Santa Cruz	56	D, E, SCr	Bet. Rob Roy Jct. & Morrissey Ave.	7.7	9/17/48	Granite Const. Co.	Highway Lighting	23,071	2,250	*25,321

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
4T128	Santa Cruz	56	E	Southerly of Aptos Ave., Sta. 3+50 to 20+00	0.5	3/7/50	Day Labor	Outer Highway	\$15,000	-----	\$15,000
1-4TC100	Santa Cruz	56	SCR	In City of Santa Cruz	-----	1/26/50	L. H. Leonardi Electric Const. Co.	Signals	9,274	\$1,800	*10,074
0-14TC38	SCR, S.B.	67	A, A	See San Benito County	-----	-----	-----	-----	-----	-----	-----
1-4TC89	Santa Cruz	116	B	San Lorenzo River	0.1	7/7/49	Granite Const. Co.	Grade, Surface & Culvert	27,393	5,200	*32,593
14DC40	Santa Cruz	FAS 1145	-----	At Soquel Creek	-----	7/28/48	Granite Const. Co.	Bridge & Approaches	80,281	978	81,259
14DC20	Santa Cruz	FAS 1146	-----	On Green Valley Rd.	0.5	6/27/47	Granite Const. Co.	Grade, P.M.S. & Bridge	62,641	5,988	68,629
-----	Santa Cruz	-----	-----	Various Locations	-----	-----	-----	Minor Contracts & D.L. Projects	42,873	-----	42,873
0-2TC25	Shasta	3	A	Cottonwood to Anderson	5.0	4/19/48	Fredrickson & Watson Const. Co.	Grade, Surface, & Bridge	637,237	42,890	680,127
0-2TC35-P	Shasta	3, 20 FAS 1074 1076	A, Rdg, C, A, B	Bet. Redding & Fall River Mills (Portions)	22.7	6/6/49	Morgan Const. Co.	Seal Coat	29,167	3,760	32,927
2T41	Shasta	3	C, D	Bet. O'Brien's Summit & Shasta Co. Line	1.3	4/17/47	Day Labor	Resurfacing	9,440	209	9,649
0-2TC33	Shasta	3	C, D, A, Dur., MSha	Crespo's to Spring Hill	35.1	6/1/49	McGillivray Const. Co.	Resurface & Seal Coat	453,945	32,727	486,672
14TC28-P	Shasta	3, 20	Rdg, C	Route 3 in Redding to 1.5 Mi. East	-----	10/7/47	Fredrickson Bros.	Grade, Surface & Bridge	645,147	34,200	*679,347
2TC23-F	Shasta	20	A	Towerhouse to Schilling	5.3	12/17/47	Fredrickson Bros.	Grade & Surface	616,825	52,427	669,752
2T43	Sha, Tri	20	A, B	See Trinity County	-----	-----	-----	-----	-----	-----	-----
2TC18	Shasta	20	B	Bet. Shasta & Schilling	4.6	8/29/46	Harns Bros. & N. M. Ball Sons	Grading & Plant Mixed Surfacing	521,291	48,275	569,566
14WLC45	Shasta	20	C	Across Sacramento River at Redding	-----	2/26/47	James I. Barnes Const. Co.	Bridge Substructure	285,713	16,918	302,631

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
2TC29	Sha, Plu, Tri	21, 20	B, B, A	See Plumas County							
2TLC2	Shasta	28	A	At Seaman's Gulch about 1 Mi. W. of Ingot.	0.8	11/20/45	A. A. Tieslau & Son	Grading, Surfacing & Culvert	\$123,801	\$13,092	\$136,893
2TC16	Shasta	28	B	Bet. 4.5 Mi. E. of Ingot & Montgomery Cr.	9.7	4/22/46	W. C. Railing	Surface with P.M.S.	71,959	4,392	76,251
0-2TC27	Sha, Sis.	28, 72	C, A	Two Locations	9.0	5/12/48	W. C. Railing	Base & Surface	133,769	15,783	149,552
0-2TC36	Shasta	28	C	6 Mi. W. of Burney	1.0	6/28/49	W. B. Jones	Grade & Surface	35,665	3,472	39,137
1-14TC73	Shasta	28	D	In Burney, Burney Creek		7/20/49	Meizger Co.	Const. Bridges & Approaches	96,884	11,184	108,068
2TC8	Sha, Las	28	E, A, B	Bet. Fall River Mills & 8.3 Mi. E. of Bieber	30.2	5/ 8/45	M. J. Ruddy & Son	Repair with P.M. Bit. Mat., Cement Treated Base & Seal Coat	203,243	28,357	231,600
2DC3	Shasta	FAS 1072		Bet. Cottonwood & Anderson	10.8	6/ 8/46	Oilfields Trucking Co. & Phoenix Const. Co.	Grading & Surfacing	235,822	20,148	255,970
2DC8	Shasta	FAS 1076		Fall River Mills to Dana	5.5	4/29/48	W. C. Railing	Grade, Base, & Seal Coat	183,052	21,254	204,306
	Shasta			Various Locations				Minor Contracts & D.L. Projects	34,522		34,522
3DC9	Sierra	FAS 524		Sierraville to 5.6 Mi. Northerly	5.6	7/13/48	Nevada Constructors, Inc.	Grade & Surface	110,516	16,666	127,182
	Sierra			Various Locations				Minor Contracts & D.L. Projects	1,087		1,087
2TC17	Siskiyou	3	A	At North Entrance to Dunsmuir		4/23/46	M. W. Brown	Correct Drainage	9,274	1,829	11,103
1-2TC32	Siskiyou	3	A	Spryng Hill to Weed	4.4	4/15/49	Harms Bros. & F. Fredenburg	Grade & Structure	383,489	32,844	*416,333
0-2TC23	Sis, Sha.	3	A, Dmr, MSha	See Shasta County							
				Bet. Weed & Yreka	20.4	4/ 1/46	Clements & Co. & Milo A. Browne	Repair with Imp. Base Mat. & P.M.S.			199,683
2TC15	Siskiyou	3	B					Surfacing	183,259	16,424	199,683
0-2TC28	Siskiyou	3	B	Gazelle to 5.5 Mi. Nly.	5.5	6/18/48	Clements & Co.		141,947	12,979	154,926

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14TC22-F	Siskiyou	3	C	Between Camp Lowe & Bailey Hill.	7.8	5/16/47	Ted F. Baum	Bridge & Underpass	\$348,820	\$30,065	\$378,885
2TC22-F	Siskiyou	3	C	Camp Lowe to Bailey Hill	7.8	9/17/47	Frederickson & Watson Const. Co.	Grading	709,109	71,200	780,309
2TC23-F	Siskiyou	3	C	Bet. Bailey Hill & State Line	1.6	5/12/47	Day Labor	Plant Mixed Surfacing	29,996	1,026	31,022
1-2TC31-F	Siskiyou	3	C	Camp Lowe to Bailey Hill	7.8	4/1/49	A. Teichert & Son, Inc.	Surfacing	303,752	38,410	*342,162
2TC14	Siskiyou	3	Yre, C	Bet. Yreka & Camp Lowe	13.3	3/25/46	Clements & Co.	Repair with C.R.B., P.M.S. & Seal Coat	178,838	12,707	191,545
2WL19	Siskiyou	46	A	At Davis Mine Cut, Br. No. 2-60	4/28/44	4/28/44	Day Labor	R.C. Box Culvert	8,165	1,380	9,545
2WL20	Siskiyou	46	A	At Mine Spillway, Br. No. 2-61	4/28/44	4/28/44	Day Labor	R.C. Box Culvert	6,800	1,193	7,993
2WL21	Siskiyou	46	A	At Sleep Cr., Br. No. 2-62	4/28/44	4/28/44	Day Labor	R.C. Box Culvert	12,237	1,184	13,421
2WL22	Siskiyou	46	A	At Curley Jack Cr., Br. No. 2-59	4/28/44	4/28/44	Day Labor	R.C. Box Culvert	9,923	1,638	11,561
1-14TC37	Siskiyou	46	A	Clear Creek	5/21/49	5/21/49	G. M. Carr & Bati Rocca	Const. Bridges & Approaches	134,748	14,914	149,662
1-14TC39	Siskiyou	46	A	At Dillon Creek	0.3	4/1/49	G. M. Carr & Bati Rocca	Grade & Surface, Const. Bridges & Approaches	168,377	22,600	*190,977
2W10	Siskiyou	46	B	Bet. Happy Camp & Thompson Creek (Portion)	11.8	4/27/45	Day Labor	Grading, Surfacing & Drainage	59,940	975	60,965
2WC10	Siskiyou	46	B, C	Bet. Thompson Cr. & 4 Mi. E. of Seiad	11.9	7/15/47	W. C. Railing	Road Mixed Surfacing	59,260	6,278	65,538
2T75	Siskiyou	46	B	Happy Camp to Cade Mountain (Portions)	4.2	5/2/49	Day Labor	Widen & Surface	12,486	-----	12,486
2W12	Siskiyou	46	D	Bet. Walker Bridge & Rte. 3	19.6	12/28/45	Day Labor	Widen Roadway & Restore Surfacing	79,922	4,295	84,217
0-2TC27	Sis. Sha.	72, 28	C, A	See Shasta County	7.5	6/5/47	Sheldon Oil Co.	Plant Mixed Surf. & Shldrs.	49,770	4,507	54,277
2WC9	Siskiyou	82	D	Bet. Fort Jones & 2.2 Mi. E. of Moffett Cr.	7.5	6/5/47	Sheldon Oil Co.	Plant Mixed Surf. & Shldrs.	49,770	4,507	54,277
2DC5-P	Sis. Mod.	210 FAS 753	A, B	See Modoc County	15.6	5/29/46	Utah Construction Co.	Grade & Gravel & Cement Base	540,005	43,078	583,083
2DC1	Siskiyou	FAS 759-A	-----	Bet. Rte. 72.3 Mi. N. of Dorris, & 4 Mi. W. of Hatfield	15.6	5/29/46	Utah Construction Co.	Minor Contracts & D.L. Projects	38,704	-----	38,704
-----	Siskiyou	-----	-----	Various Locations	-----	-----	-----	-----	-----	-----	-----
COFC4	Sol., C.C.	7	A, F	See Contra Costa County	4.0	10/29/46	Day Labor	Surface Shldrs.	17,764	887	18,651
10T36	Solano	7	B	Bet. Rockville Rd. & County Hospital	4.7	8/4/48	Parish Bros.	Grade, Pave & 2 Structures	1,217,813	95,000	*1,462,475
0-10TC35-F	Solano	7	B, C	Ledgewood Cr. to 3.5 Mi. E. of Fairfield	4.7	9/27/48	L. H. Leonard Electric Const. Co.	Signals & Lighting	20,117	1,949	22,116
0-10TC39	Solano	7	B, C	Near Fairfield	4.7	9/27/48	L. H. Leonard Electric Const. Co.	Signals & Lighting	20,117	1,949	22,116

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
10TC18	Solano	7, 90	C, Vac	Bet. Fairfield & 3.5 Mi. N. of Vacaville	4.8	5/13/47	Fredrickson Bros.	Plant Mixed Surfacing	\$44,697	\$2,879	\$47,576
10TC34	Solano	7	C	E. of Fairfield to E. of Alamo Cr.	4.3	6/24/48	Harns Bros.	Grade, Pave, & Bridge	822,320	70,000	*892,320
10TC9	Solano	7	D, I	Bet. Midway & 1.3 Mi. N. of Dixon	6.1	1/17/46	Fredrickson Bros.	Grading, P.C.C. Pav. & Bridges	1,078,243	55,355	1,133,598
1-10TC48	Solano, Yolo	7, 6	D, I, A, E, A	E. of Ulatas Cr. to W. of Yolo Causeway	---	5/12/49	Harns Brothers	Widen Crossovers, Curbs, & Barrier	66,858	3,359	70,217
10TC13	Sol, Yolo	7	E, A	Across Putah Cr. about 6 Mi. N. of Dixon	---	7/29/46	M. A. Jenkins	Repair Bridge	9,469	1,896	11,365
COF-8	Sol, C.C.	7	F, A	See Contra Costa County	---	---	---	---	---	---	---
10TC27-F	Solano	7, 74	F, G, D	Bet. Vallejo Wye & ½ Mi. N. of Rte. 208	5.6	2/16/48	Parish Brothers	Grade, Pave & Structures	1,168,008	130,000	*1,298,008
1-10TC53	Sol, Nap	7	H	See Napa County	---	---	---	---	---	---	---
1-10TC36	Sol, Nap	7	H	See Napa County	---	---	---	---	---	---	---
10RTC4	Solano	7	I	Milk Farm	0.3	6/28/48	Harns Bros.	Grade & Surface	14,530	1,990	16,520
10TC21	Solano	7	Frid	Bet. Madison St. & Union Ave.	---	6/ 7/47	Ed. Pierce Elec. Co.	Traffic Signals	8,908	964	9,872
10TC8	Solano	7	Vac, D	Bet. Ulatas Cr. & Midway	6.0	12/ 5/45	Fredrickson Bros.	Grading, P.C.C. Pav. & Bridges	561,205	45,796	607,001
10W40	Solano	53	A, B	Bet. Suisun & Rio Vista	---	8/ 7/46	Day Labor	Repairing War Damage	60,162	2,899	63,061
14WLC47	Sol, Sac	53	C, A	Across Sacramento River at Rio Vista	---	4/21/47	C. M. Allen	Repair Bridge	9,296	1,084	10,380
10W42	Solano	74	C	Bet. Benicia Arsenal Grounds & Cordelia	8.7	8/19/46	Day Labor	Resurfacing	41,570	2,136	43,706
10TT79	Solano	74	Val	At 4th St. & Lemon St.	---	3/14/50	Day Labor	Signals & Lighting	5,011	---	*5,011
10WC14	Solano	90	A	Bet. Rte. 7 & 0.5 Mi. N. of Sweeney Cr.	5.7	9/19/46	Fredrickson Bros.	Grade P.C.C. Pave & 5 Bridges	541,151	42,540	583,691
10W46	Solano	90	A	Bet. Alendale Jct. & Winters	---	10/18/46	Day Labor	Repair Sidlrs.	5,269	270	5,539
10W39	Solano	90	A	Bet. Alendale & Putah Cr. (Portions)	4.7	7/24/46	Day Labor	Resurfacing	15,983	791	16,774
14WLC54	Solano	99	A	Across Miner Slough	---	6/ 5/47	C. M. Allen	Widen Bridge	4,857	155	5,012
14TC26	Solano	99, 100	A, A	Cacho Slough Ferry & Steamboat Slough Ferry	---	9/30/47	C. M. Allen	Three Ferry Ramps	7,337	1,160	8,497

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14WC5	Solano.....	208	A	Across Napa River at W. City Limits of Vallejo.....	-----	3/ 1/46	Healy Tibbitts Const. Co.	Repair Bridge Fender.....	\$14,251	\$1,755	\$16,006
0-14TC48	Solano.....	208	A	Napa River.....	-----	6/23/48	H. F. Lutzzen	Repair Bridge.....	5,704	453	6,157
1-14TC83	Solano.....	208	A	At Napa River Bridge near Vallejo.....	-----	12/ 2/49	Crabbe Electric	Emergency Generator.....	7,116	609	7,725
14DC8	Solano.....	FAS 1106 1108 1110	-----	Across Pleasant Cr., Alamo Cr., & Tributary to Putah Cr.....	-----	4/ 4/47	G. M. Carr & Bati Rocca	Five Bridges.....	82,713	4,329	87,042
14DC44	Solano.....	FAS 1108	-----	Across Alamo Cr.....	-----	10/ 6/48	Wm. E. Thomas Const. Co.	Structures.....	16,323	2,093	18,416
10ANC12	Solano.....	Access	Val	On Waterfront Rd. Bet. Virginia St. & Santa Clara St.....	0.3	2/ 4/46	C. M. Syar	Grading & A.C. Paving.....	31,421	-----	31,421
-----	Solano.....	-----	-----	Various Locations.....	-----	-----	-----	Minor Contracts & D.L. Projects	25,873	-----	25,873
4TC63	Sonoma.....	1	A	Near Cloverdale.....	-----	6/28/48	Stolte, Inc., & The Duncanson-Harrelson Co.	Truck Scales.....	24,917	1,085	26,002
1-4TC85	Sonoma.....	1	A, B	Cloverdale to Healdsburg.....	4.8	5/19/49	A. G. Raisch Co.	Grade & Surface.....	153,760	24,500	*178,260
4TC129	Sonoma.....	1	-----	Cloverdale to 2 Mi. N. of Santa Rosa.....	10.6	3/ 7/50	Day Labor	Subsealing.....	44,778	-----	*14,778
4TC60	Sonoma.....	1	B	Healdsburg to Santa Rosa.....	1.7	3/31/47	Day Labor	Resurfacing.....	29,271	156	29,427
0-4TC56	Sonoma.....	1	B, E, SRO	2 Mi. N. to 0.7 Mi. S. of Santa Rosa.....	4.3	5/20/48	Stolte, Inc., & The Duncanson-Harrelson Co.	Grade, Pave & Structures.....	1,362,993	110,000	*1,472,993
4TC34	Sonoma.....	1	C	Bet. 3 Mi. N. & 1 Mi. S. of Petaluma.....	4.0	4/23/47	A. G. Raisch Co.	Surfacing.....	86,029	6,352	92,381
4TC21	Son., Mm.....	1	C, A	Bet. 1 Mi. S. of Petaluma & Ignacio Wye.....	11.9	1/17/46	A. G. Raisch Co. & Harms Bros.	Grading, P.C.C. Pave & Struct.....	1,643,187	156,847	1,800,034
0-4TC69	Sonoma.....	1	E, SRO	Thru Santa Rosa.....	-----	8/10/48	H. S. Tittle Company.....	Signals & Lighting.....	37,013	4,000	*41,013
4TC122	Sonoma.....	1	E, B	0.3 Mi. S. to 1.7 Mi. N. of Santa Rosa.....	-----	10/18/49	Day Labor	Revise Signals.....	25,000	-----	25,000
1-4TC91	Sonoma.....	1	E, SRO	Steele Lane to Baker Rd.....	2.8	8/ 5/49	Stephen L. Vistica.....	Landscaping.....	34,540	6,400	*40,940
4TC6	Sonoma.....	1	SRO	College Ave. & 5th St.....	-----	11/ 1/46	Day Labor	Purchase Signals.....	8,038	597	8,635
4TC125	Sonoma.....	8	B	15 Mi. E. of Marin-Sonoma Co. Line.....	-----	12/14/49	Day Labor	Const. Retaining Wall.....	11,300	500	*11,800
0-4TC75	Sonoma.....	51	C	Purple Draw & Laguna De Santa Rosa ..	0.3	3/15/49	A. G. Raisch Co.....	Widen Bridge & Culvert.....	57,528	8,250	65,778

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
4T112	Sonoma	56	C, D, E	Jenner to Gualala River	2.4	9/10/48	Day Labor	Grade & Surface	\$50,000	\$2,000	*\$52,000
4W30	Sonoma	56	E	At Various Locations		8/13/46	Day Labor	Improve Drainage	6,323		6,323
14TC33	Sonoma	208	A	Across Toley Cr. about 14 Mi. W. of Vallejo		11/29/47	Evans Const. Co.	Readek Bridge	8,612	1,603	10,215
14DC2	Sonoma	FAS 786		Across Russian River at Hacienda		9/13/46	Kiss Crane Co.	Steel & Concrete Bridge	123,197	2,268	125,465
14DC37	Sonoma	FAS 788		Jintown Bridge		6/16/48	C. B. Tuttle Co.	Constr. Bridge & Approach	373,631	27,914	401,545
	Sonoma			Various Locations				Minor Contracts & D.L. Projects	72,465		72,465
0-10TC31	Sta, Mer	4	A, B, A, C	See Merced County							
14TC21	Sta, S.J.	4	B, A	Across Stanislaus River		4/25/47	Fredrickson & Watson Const. Co.	Steel Bridge	352,697	13,913	366,610
1-10TC46	Sta, S.J.	4	B, A, Rip, C	Bet. Salida & 1 Mile North of Ripon & Bet. Calaveras River & Lodi	11.9	4/1/49	Henry C. Soto Corp.	Landscape	17,114	1,774	18,888
10TC15	Sta, S.J.	4	B, A, Rip	Bet. Salida & 1 Mi. N. of Ripon	4.5	7/15/46	A. Teichert & Son, Inc.	Grading & Paving	434,113	52,161	486,274
10TC24	Sta, S.J.	4	B, A, Rip	Bet. Salida & 1 Mi. N. of Ripon		10/20/47	Evans Const. Co.	Barrier Posts & Guard Rail	9,901	1,773	11,674
1-10TC44	Sta, Mer	4	D, A Cer, B	See Merced County							
10TC22	Stanislaus	4	Cer	On Fourth St. in Ceres		6/10/47	L. H. Leonardi Elect. Const. Co.	Signals	14,007	1,794	15,801
10GC6	Stanislaus	4	Tur	Between Olive St. and Marshall St.		5/12/48	Collins Elec. Co.	Signals	6,905	618	7,523
0-10TC32	Stanislaus	13	B	1.3 Mi. E. of Oakdale to 1.8 Mi. W. of Tur. Co. Line	9.6	4/28/48	M. J. Ruddy & Son	Grade & Surface	202,165	24,200	*226,365
10TLC1	Stanislaus	13	B	At Wildcat Creek	0.4	6/27/47	Biasotti Const. Co.	Grade & Culvert	46,820	4,084	51,504
0-10TC29	Stanislaus	41	A, B	Newman to San Joaquin County Line	6.2	4/1/48	M. J. Ruddy & Son	Grade & Surface	140,606	8,375	148,981
1-10TC35	Stanislaus	41	B, Pat	At Patterson	0.5	8/31/49	H. Sykes	Grade & Surface	28,750	6,443	*35,193
0-10TMC7	Stanislaus	66	Okdl	"D" St. to "B" St.	0.2	8/30/48	M. J. Ruddy & Son	Surfacing	13,806		13,806

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
10TC19	Sta, Mer.	110, 4	C, D	See Merced County							
14DC17	Stanislaus	FAS 912		Across Tuolumne River about 6 Mi. E. of Modesto		5/22/47	Erickson, Phillips, & Weisberg	R. C. Bridge	\$145,556	\$1,332	\$146,988
10DC3	Stanislaus	FAS 912		Empire to Hughson	0.9	4/22/48	Louis Basotti & Co.	Grade & Surfacing	34,165	935	35,100
10DC6	Stanislaus	FAS 915		San Joaquin River 4.5 Mi. N.E. Crows Landing	0.6	6/16/49	Karl C. Harneling	Grade & Surface	34,364	334	34,698
14DC38	Stanislaus	FAS 915		San Joaquin River 4.5 Mi. E. Crows Landing		6/21/48	Bos Const. Co.	Const. R. C. Bridge	172,026	1,803	173,829
	Stanislaus			Various Locations				Minor Contracts & D.L. Projects	17,159	200	17,359
0-3TC51P	Sut, But.	3	A, LiO, A, Grd	Lomo to Fagan & in Gridley	7.1	4/ 1/48	McGillivray Const. Co.	Surfacing	91,513	4,068	95,581
1-3TC69	Sut, But.	3	A, LiO, A	2.5 Mi. South Live Oak to Gridley		11/18/49	L. Bormolini & Son	Improve Drainage	41,220	6,800	*48,020
3TC40	Sutter	3	LiO, A	At Live Oak	1.7	10/ 8/47	McGillivray Const. Co.	Grade & Surface	166,346	22,156	188,502
3TC42	Sut, Yub.	3	Y.C, Mcl	See Yuba County							
3TC47	Sut, Yub.	3	Y.C, Mcl	See Yuba County							
3TC28	Sut, Yub.	3	Y.C, Mcl	See Yuba County							
14TC5	Sut, Yub.	3	Y.C, Mcl	See Yuba County							
14TC30	Sutter	87	B	Sutter Bypass N. of Knights Landing		10/23/47	Wm. S. Sheald	Repair Bridge	21,218	1,551	22,869
3W40	Sutter	87	B	Sutter Bypass to Tudor Road	2.0	9/30/47	Day Labor	Grade Shoulders	6,999		6,999
3TC18	Sut, Yub.	87, 3	B, A, B	See Yuba County							
14DC46	Sutter	FAS 926		Cross Canal		11/22/48	Lord & Bishop	Const. Bridge	117,849	10,588	128,437
3DC19	Sutter	FAS 926		Nicolaus Bridge to Tudor	7.3	9/15/49	A. Teichert & Son, Inc.	Resurface	65,883	2,000	*67,883

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
3DC13	Sutter	FAS 926		Sacramento Co. Line to S. of Striplin Road	7.9	2/17/49	P. J. Moore & Son & Harms Bros.	Grade & Seal	\$246,029	\$20,000	*\$266,029
	Sutter			Various Locations				Minor Contracts & D.L. Projects	1,023		1,023
2TC13	Tehama	3	C	Bet. 6 Mi. N. of Red Bluff & Shasta Co. Line	7.1	1/21/46	Oilfields Trucking Co. & Phoenix Const. Co.	Grading & Plant Mixed Surf.	539,402	66,106	605,508
2TC19	Tehama	3	D	Bet. Mill Race Cr. & Red Bluff	2.8	4/ 2/47	Morrison - Knudsen Co., Inc.	Grading & Plant Mixed Surf.	140,290	16,759	157,049
14TC8	Tehama	3	D	Across East & West Sand Sloughs, Sampson Slough, Paynes Cr., Salt Cr. & Salt Cr. Overflow		1/22/46	J. D. Proctor, Inc. & Dragline Rentals Co.	Const. 5 Bridges & Widen 2 Bridges	366,313	36,444	402,757
2TL15	Tehama	29	A	At Ramsey Cr., Br. No. 8-53		4/ 2/46	Day Labor	Repair Bridge	6,542	270	6,812
2TL16	Tehama	29	A	At Flopper Cr., Br. No. 8-54		6/ 3/46	Day Labor	Repair Bridge	9,832	269	10,101
2TL17	Tehama	29	A	At Dehaven Gulch, Br. No. 8-55		9/10/47	Day Labor	Repair & Reconstruct Deck	11,392	220	11,612
2WL27	Tehama	29	D, E	At Dry Creek & Salt Creek		4/24/47	Day Labor	Repair Bridges	11,700		11,700
14WLC58	Tehama	29	E	Across S. Fork Cottonwood Cr.		8/28/47	C. M. Allen	Repair Bridge	12,682	859	13,541
1-14TC77	Tehama	29	E	South Fork of Cottonwood Creek		9/ 8/49	Evans Const. Co.	Repair Bridge	13,905	1,582	15,487
14DC27	Tehama	FAS 1078 1082		Thomes Creek & Reed Creek		10/ 3/47	G. M. Carr & Bati Rocca	2 Bridges & Approaches	180,617	16,877	198,494
14DC45	Tehama	FAS 1078 1081 1083		Various Locations		10/19/48	O'Conner Bros.	Const. 3 Bridges & Approaches	267,140	23,089	290,229
14DC52	Tehama	FAS 1080		Elder Creek ½ Mi. S. of Gerber		8/12/49	Transocean Engr. Corp.	Const. Bridge	55,262	7,300	*\$62,562
	Tehama			Various Locations				Minor Contracts & D.L. Projects	7,600		7,600

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
2DC6	Trinity	20, FAS 1089	A	Rte. 20 to Browns Mtn. & at E. Weaver Cr.	6.5	6/30/47	N. M. Ball Sons.	Culvert & Surface.	\$269,686	\$34,700	*\$304,386
2TC29	Tri, Plu, Sha	20, 21	A, B, B	See Plumas County							
2T43	Tri, Sha	20	B, A	Bet. 1.4 Mi. E. of Buckhorn Maint. Sta. & 4.74 Mi. E. of Trinity Co. Line	6.45	4/17/47	Day Labor	Resurfacing	30,356	1,469	31,825
1T66	Trinity	20	C	Sta. 0+00 to Sta. 355+00		10/11/48	Day Labor	Oiling	10,000		10,000
1T65	Trinity	20	C, D	Willow Cr. to Whites Bar (Portions)	15.2	7/1/48	Day Labor	Grade & Surface	255,135	18,203	273,338
1W22	Trinity	20	C, D	Bet. New River Bluffs & Cedar Flat		10/9/45	Day Labor	Bituminous Surfacing	11,485	307	11,792
41W10	Tri, Hum	20	C, D, D	See Humboldt County							
1T65	Tri, Hum	20	C, D	See Humboldt County							
1T69	Tri, Hum	20	C, D	See Humboldt County							
14WLC31	Trinity	29	A	Across Hayfork Cr. about 58 Mi. W. of Red Bluff		5/17/46	C. C. Gildersleeve	Bridge	9,582	1,028	10,610
1T68	Trinity	35	B	Peanut to Hayfork	5.9	3/11/49	Day Labor	Grade & Surface	14,999	575	15,574
14WLC55	Trinity	35	C	At Redding Cr.		6/12/47	C. C. Gildersleeve	Widening Bridge	19,020	1,204	20,224
2DC10	Trinity	FAS 1089		Rte. 20 to Brown's Mountain	6.3	8/25/48	Morgan Const. Co.	Seal Coat	13,594	1,348	*14,942
	Trinity			Various Locations				Minor Contracts & D.L. Projects	11,553		11,553
14VC29	Tulare	4	A	At White River Sink		3/5/47	Wheeler Const. Co.	Bridge & Approaches	31,264	4,732	35,996
6XC13	Tul, Ker	4, 33	A, D	Bet. Delano & 2.5 Mi. S. of Earlimart & 2.1 Mi. E. of Wasco & Famoso	8.3	4/10/47	Griffith Company	Plant Mixed Surfacing	84,588	6,529	91,117
6VC3	Tulare	4	B, E, F	Bet. Quail Sta. & 6.5 Mi. N. of Goshen	13.5	4/13/45	Brown, Doko & Baum	Plant Mixed Bit. Material	110,714	12,176	122,890
6V14	Tulare	4	E, F	Bet. Rte. 127 & 9.5 Mi. N. of Goshen		3/19/46	Day Labor	Restore Oiled Borders	15,681	229	15,910
0-6VC27	Tulare	4	B	1 Mi. S. of Tipton to Tulare Airport	7.9	8/3/48	N. M. Ball Sons	Grade & Structures	598,844	61,042	659,886
0-6VC35-F	Tulare	4	B	1 Mi. S. of Tipton to Tulare Airport	7.8	6/1/49	N. M. Ball Sons	Pave	650,202	78,000	*728,202

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
6TC11P	Tul. Fre.	4	E, D Kugb, A	Mendocino Ave. to ¼ Mi. N. of Kingsburg.	---	2/27/48	Tri-Cities Elec. Serv.	Signals & Lighting.	\$27,235	\$2,034	\$29,269
6TC8P	Tul. Fre.	4	E, D Kugb, A	See Fresno County	---	6/7/46	Valley Paving & Const. Co., Inc.	Repair with P.M.S. & Seal Coat	33,725	4,785	38,510
6VC9	Tulare	4	E	Bet. 3.6 & 0.4 Mi. S. of Kingsburg.	3.0	9/15/49 6/18/48	Geo. E. France, Inc. Guy F. Atkinson Co.	Resurface. Grade, Pave & Structure.	48,177 789,670	6,131 84,394	54,308 874,064
1-6VC39	Tulare	4	F	Bet. 0.5 Mi. S. of Tagus & Rte. 10.	2.9	7/7/49	Thomas Const. Co.	Const. Bridge & Culvert.	61,061	7,986	69,047
6VC22	Tulare	4	F	Bet. 0.5 Mi. S. of Tagus & Rte. 10.	5.0	3/20/47	Day Labor.	Resurfacing.	28,074	189	28,263
6XC10	Tul. Ker.	129	A, A, B	See Kern County	---	3/24/47	R. M. Price Co.	Bridge & Approaches.	89,154	9,408	98,562
0-6VC23	Tul. Ker.	129	A, A, B	See Kern County	---	4/1/49	Valley Paving & Const. Co., Inc.	Surfacing.	52,495	6,026	58,521
1-14VC89	Tulare	129	B	Bet. Deer Cr. & Deer Cr. Ditch.	---	3/24/47	R. M. Price Co.	Grade & Plant Mixed Surf.	219,489	16,294	235,783
6X22	Tulare	129	D	Bet. Cairn's Corners & 4.4 Mi. Northerly.	4.4	6/7/49	Anderson Co.	Surface & Const. Bridge.	146,550	17,004	163,554
14XC20	Tulare	129	E	At Yokohl Cr.	---	6/29/48	Geo. E. France, Inc.	Grade & Bit. Surf. Tr.	145,191	9,004	154,195
1-6VC31	Tulare	132	A	Rte. 134 to Packwood Cr.	5.8	12/9/47	Trewhitt, Shields & Fisher	4 R.C. Bridges.	47,578	3,827	51,405
6XC12	Tulare	132	A, Vis	Bet. Packwood Cr. & Rte. 10.	2.3	11/29/47	F. Gunner Gramatyk	I.B. & Plant Mixed Surfacing.	51,497	2,421	53,918
0-14VC87	Tulare	133	A	St. John's River, 4 Mi. NE. Visalia.	1.2	7/23/47	Trewhitt, Shields & Fisher	R.C. Bridge.	127,206	4,221	131,427
6DC11	Tulare	FAS 1126	---	FAS Rte. 1129 to State Rte. 134.	8.0	---	---	---	---	---	---
14DC32	Tulare	FAS 1126 1137	---	Bet. 3 & 15 Mi. S. of Visalia (Portions).	---	---	---	---	---	---	---
6DC8	Tulare	FAS 1128	---	Bet. 4 Mi. & 6.5 Mi. W. of Porterville.	---	---	---	---	---	---	---
14DC23	Tulare	FAS 1128	---	Across Tule River.	---	---	---	---	---	---	---

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
6DC6	Tulare	FAS 1129 1130		Bet. 2 Mi. W. of Woodville & Poplar	8.0	7/23/47	F. Gunner Gramatky	Widen & Plant Mixed Surf.	\$183,226	\$6,306	\$189,532
14DC14	Tulare	FAS 1130		Across White River about 7 Mi. SE. of Earlimart		5/16/47	E. H. Peterson & Son	R.C. Slab Bridge	15,136	374	15,510
14DC15	Tulare	FAS 1136 1138		Across St. Johns River		5/12/47	Northrup Const. Co.	R.C. Bridges	133,697	3,737	137,434
14DC28	Tulare	FAS 1140		At St. Johns River		10/10/47	Charles MacClosky Co.	Reconstruct Existing Bridge	65,621	4,931	70,552
14DC41	Tulare	FAS 1140		Across Peoples Ditch		8/11/48	Trewhitt, Shields & Fisher	Steel Bridge	34,190	4,596	38,786
1-14DC56-P	Tulare	FAS 1140		Bet. Kaweah River & Kelehum Ditch about 10 Mi. NE. of Visalia		9/29/49	C. B. Tuttle Co.	Const. Bridge & Culvert	50,696	470	51,166
14DC19	Tulare	FAS 1142		Across Kings River about 5.5 Mi. W. of Dinuba		6/ 4/47	Carl N. Svenson Co., Inc.	R.C. Girder Bridge	190,875	5,581	196,456
	Tulare			Various Locations				Minor Contracts & D.L. Projects	26,401	474	26,875
10TC16	Tuolumne	13	Sra	In Sonora on Stockton St.	0.4	1/24/47	Beerman & Jones	Grading & Plant Mixed Surf.	79,299	16,767	96,066
14TC34	Tuolumne	40	A, B	Tuolumne River at Stevens Bar	0.2	12/26/47	Elmer J. Warner	Bridge & Approaches	176,403	15,463	191,866
	Tuolumne			Various Locations				Minor Contracts & D.L. Projects	12,661		12,661
7VC83	Ventura	2	C	1.1 Mi. W. of Montalvo		6/29/48	Jesse S. Smith & A. A. Edmondson	Scales & Approaches	47,755	3,673	51,428
7VC30	Ventura	2	C, Ven	Bet. Montalvo & Ventura	3.4	2/ 4/47	J. E. Haddock, Ltd.	Grading & Paving	601,139	63,453	664,592
7VC32	Ventura	2, 9, 79	C, A, Ven	At Inter. of Ventura Blvd. with Telephone & Telegraph Rds.		3/24/47	L. H. Leonardi Elect. Const. Co.	Traffic Signals	36,485	1,523	38,008

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
7VC61	Ventura	2, 60	C, B	Jct., Route 2 & Route 60 near El Rio	1.3	2/20/48	Smith-Edmondson Co.	Surfacing	\$169,552	\$22,654	\$192,206
7VC69	Ventura	2, 60	C, B	Jct., Route 2 & Route 60 near El Rio	---	3/29/48	Tri-Cities Elec. Serv.	Signals	21,628	1,408	23,036
1-7VC121	Ventura	2	C	Montalvo to Ventura	1.8	6/ 1/49	Baker & Pollock	Surface	56,670	6,647	63,317
7VC84	Ventura	2	F	Seacliff to Mussel Shoal	1.2	6/29/48	Clyde W. Wood, Inc.	Grade & Surface	1,117,122	76,831	1,193,953
7VC77	Ventura	2	Ven	In Ventura	---	6/11/48	Tri-Cities Elec. Serv.	Signals	38,779	2,048	40,827
51-7VC2	Ventura	2	Ven	In Ventura, E.C.L. to St. Jon Road	1.3	4/ 1/50	Griffith Co.	Surface	32,735	5,000	*37,735
7V153	Ventura	9	C	At Santa Susana Pass	0.89	11/ 2/49	Day Labor	Widen & Resurface	34,766	1,457	36,223
7V63	Ventura	60	A	Bet. Oxnard & Big Sycamore	---	3/25/47	Day Labor	Road Repairs	8,344	---	8,344
7VC36	Ventura	60	A	Bet. Oxnard & Big Sycamore Cr.	5.7	5/ 5/47	Baker & Pollock	Resurfacing with P.M.S.	87,190	6,202	93,392
0-7VC129	Ventura	60	B	Oxnard Blvd.	---	6/28/49	Tri-Cities Electrical Service, Inc.	Signals & Lighting	11,687	1,507	*13,194
0-14VC74	Ventura	60	B	0.5 Mi. W. of El Rio	---	11/ 5/48	Grant L. Miner	Widen Underpass	122,345	14,542	136,887
0-7VC126	Ventura	60	B, Oxn	Rte. 2 to Oxnard	2.1	6/18/49	Griffith Co.	Grade & Pave	238,518	35,800	*274,318
7VMC24	Ventura	60	Oxn	On Oxnard Blvd. in Oxnard	---	4/22/48	Elec. & Mach. Serv., Inc.	Signals	11,536	---	11,536
7X48	Ventura	79	A	Bet. Sta. 486 & Sta. 513	0.5	2/21/46	Day Labor	Improve Drainage	5,194	---	5,194
7XC34	Ventura	79	A	Ellsworth, Barranca & Santa Paula	4.0	5/ 9/47	O'Brien & Bell Const. Co.	P.M.S. & Shldrs.	23,927	1,191	25,118
1-7VC123	Ventura	79	A	Wells Road to Ellsworth Barranca	1.4	6/ 7/49	C. J. B. Const. Co.	Widening & Resurface	33,486	4,310	37,796
1-7VC124	Ventura	138	A	2.5 Mi. to 6.4 Mi. N. Ventura City Limits	4.0	6/ 6/49	Frank T. Hickey, Inc.	Grade & Surface	92,765	10,800	103,565
7X114	Ventura	138	B	N. Fork Matilija Cr., Br. No. 52-173	---	5/16/46	Day Labor	Replace Bridge	30,526	1,412	31,938
7V136	Ventura	138	B	Matilija Creek	0.2	10/22/48	Day Labor	Const. R.C. Bridge	58,540	4,228	63,768
7V100	Ventura	138	Ven	In Ventura, Bet. Main St. & North City Limits	0.65	1/17/48	Day Labor	Resurfacing	7,935	---	7,935
1-7VC119	Ventura	153	B	Rte. 2 to Rte. 9	4.1	5/26/49	Frank T. Hickey, Inc.	Resurface	28,511	7,432	35,943
7DC3	Ventura	FAS 868	---	On Pleasant Valley Rd., & Wood Rd., Bet. Ventura County R.R. & Ventura Blvd.	6.5	6/26/47	Frank T. Hickey, Inc.	Plant Mixed Surf.	154,539	14,419	168,958

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
7DC1	Ventura	FAS 877		On Las Posas Rd., Bet. State Hwy. Rte. 2 & State Hwy. Rte. 153	4.3	12/ 6/46	MacDonald & Kruse, Inc.	Surfacing	\$68,575	\$6,042	\$74,617
	Ventura			Various Locations				Minor Contracts & D.L. Projects	24,037		24,037
3WC7	Yolo	6, 99	A, B	Bet. 1 Mi. E. of Davis & Swingle & Bet. 2.25 Mi. N. of Arcade Sta. & Js. Rte. 6.	7.3	5/21/46	A. Teichert & Son, Inc.	Repair with P.M.S. & C.R.B.	74,047	5,182	79,229
1-40TC48	Yol. Sol.	6	E, A	See Solano County							
3WC12	Yolo	7, 87	A, A	Bet. 1.9 Mi. N. of Solano Co. Line & 1.6 Mi. S. of Woodland & Bet. 0.3 Mi. & 3.9 Mi. N. of Woodland	4.9	6/18/47	McGillivray Const. Co.	Plant Mixed Surfacing	45,613	2,282	47,895
3WC10	Yolo	7, 87	A, Wd, A	Bet. 1.25 Mi. N. of Solano Co. Line & Woodland & Bet. 3.75 Mi. N. of Woodland & 1 Mi. S. of Knights Landing	9.2	4/16/47	McGillivray Const. Co.	P.M.S. & Seal Coat	87,174	7,553	94,727
14TC13	Yol. Sol.	7	A, E	See Solano County							
0-3TC48	Yolo	7, 87	A, B, Wd, A	Putah Cr. to Zamora & Woodland to Knights Landing	24.6	4/10/48	Munn & Perkins	Grade & Surface	45,792	5,445	51,237
3TS9	Yolo	7	A	S.P. Crossing at Mullen		1/13/49	Day Labor	Improve Crossing	5,653	670	6,323
1-14TC70	Yolo	7	A, B, C	Putah Creek to Cousa Co. Line		7/ 1/49	Grant L. Miner	Construct & Widen Structures	148,518	18,135	*166,653
3TC25	Yolo	7	B, C	Bet. Cache Cr. & Dunnigan	14.0	5/21/46	Fredrickson Bros.	Repair with P.M.S. & C.R.B. & Place Imp. Borrow on Shldr.	153,896	10,552	164,448
1-3TC68	Yolo	7	B, C	At Zamora	1.2	8/ 2/49	Fredrickson Bros.	Grade & Surface	133,118	13,300	*146,418
3TB5	Yolo	7	C	Bet. Zamora & Hershey	10.9	4/17/47	Day Labor	Prime & Seal Shldr.	11,194	57	11,251
1-3TC61	Yolo	50	C	Saltroyer & Salt Creeks	0.7	5/11/49	O'Connor Bros.	Const. 2 R.C. Culverts & Apprs.	44,446	7,150	*51,596
14WLC32	Yolo	50	E	At Tule Canal about 6 Mi. E. of Woodland		6/25/46	M. A. Jenkins	Bridges & Approaches	87,102	9,317	96,419
3WC13	Yolo	50	E	At W. Side of Yolo By-pass	0.1	7/29/47	H & D Const. Co.	Grading & Surfacing	33,813	3,808	37,621
3TC53	Yolo	50	F	North End of Sacramento Wier	0.2	5/27/48	A. Teichert & Son, Inc.	Grade & Surface	14,797	2,131	16,928

DEPARTMENT OF PUBLIC WORKS

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
3WC8 1-14TC63	Yolo	87	A	Bet. Woodland & Knights Landing	9.5	6/26/46	Folsom & Drollinger	Crusher Run Base Borders	\$35,221	\$2,313	\$37,534
	Yolo	87	A	Sacramento River at Knight's Landing	4/ 1/49	4/ 1/49	B. S. McEllderry	Repair Bridge	34,393	2,222	36,615
1-3TC59	Yolo	90	A, B	Winters to Rte. 7	16.1	4/19/49	McGillivray Const. Co.	Bituminous, Surface Treat, & Imp. Borrow	123,490	13,500	*136,990
3WC11	Yolo	99	A	Bet. Solano Co. Line & 2 Mi. S. of Irrigation Canal	8.9	5/15/47	McGillivray Const. Co.	Construct Shldrs.	27,565	1,282	28,847
14DC7	Yolo	FAS 1154 1152		Across Moody Slough & Across Cache Cr.		3/ 7/47	Chittenden & Chittenden	Two Bridges	74,252	4,078	78,330
14DC39	Yolo	FAS 1155		Cache Creek		8/ 9/48	Chas. T. Brown Co.	Reconstruct Bridge	71,471	6,040	77,511
3DC8	Yolo	FAS 1156		Route 99 to Clarksburg	4.5	5/ 6/48	A. Teichert & Son, Inc.	Grade & Pen. Tr.	93,351	4,236	97,587
14DC31	Yolo	FAS 1158		Knights Landing Ridge Cut Canal		11/17/47	Chittenden & Chittenden	Timber Trestle Bridge	50,243	3,863	54,106
	Yolo			Various Locations				Minor Contracts & D.L. Projects	11,351		11,351
3TC43	Yuba	3	A	At Grasshopper Slough Overflow		4/22/46	Day Labor	Replace Timber Structure with C.M.P. Culvert & Fill	5,344		5,344
1-3TC65	Yub, Pla	3	A, B	See Placer County							
3TC18	Yub, Sut.	3, 87	B, A, B	On Rte. 3 Bet. Morrison's Crossing & Linda Corners, Bet. Yuba City & Lono, & on Rte. 87, Bet. Sutter By-pass & Tudor Rd.	12.2	6/ 4/45	Lester L. Rice	Repair with Imp. Bor. & P.M. Bit. Matl.	100,700	5,463	106,163
0-14TC68 3TC28	Yuba	3	B, MvL	Across Yuba River		6/ 7/49	Underground Const. Co.	Repair Bridge	99,658	2,098	101,756
	Yub, Sut.	3	MvL, Y.C.	Bet. D St. Bridge in Marysville & Rte. 15 in Yuba City	2.0	6/22/46	Lester L. Rice	A.C. Surfacing	671,738	55,995	727,733
14TC5	Yub, Sut.	3	MvL, Y.C.	Bet. I St. in Marysville & Market St. in Yuba City	0.9	12/19/45	J. H. Pomeroy & Co., Inc.	Bridge & Approaches	1,853,359	84,327	1,937,686
3TC47	Yub, Sut.	3	MvL, Y.C.	"D" St. Bridge to Live Oak Road	2.0	2/17/48	Huetting & Schromm	Landscaping	38,885	8,200	*47,085
3TC42	Yub, Sut.	3	MvL, Y.C.	"D" St. Bridge to Route 15 in Yuba City		11/ 5/47	Tr-Cities Elec. Serv.	Signals & Lighting	83,160	3,561	86,721

COMPLETED CONTRACTS—June 30, 1950—Continued

Contract number	County	Route	Section	Location	Miles	Contract date	Contractor	Type of work	Const. cost	Const. engr.	Total
14WLC37	Yuba.....	87	A	At Simmerly Slough.....		7/11/46	Lord & Bishop.....	Timber Bridge.....	\$13,641	\$1,135	\$14,776
3DC10	Yuba.....	FAS 326		N. of Stanfield Hill to S. of French Town Road.....	4.1	10/ 6/48	A. R. McEwen.....	Penetration Treatment & Seal...	179,410	18,646	198,056
14DC21	Yuba.....	FAS 321		Plumas School to FAS Route 922.....	1.2	9/10/47	H. Earl Parker, Inc.....	Grade, Imp. Bor. & 2 Bridges....	91,079	12,262	103,341
-----	Yuba.....			Various Locations.....				Minor Contracts & D.L. Projects.	15,872	500	16,372

INCOMPLETE CONTRACTS

Contract number	County	Route	Section	Location	Length, miles	Contract date	Contractor	Type of work	Allotment
1-4TC105-F	Alameda	5	B	1.5 Mi. W. of Livermore to Hopyard Rd.	5.9	5/31/50	Fredrickson & Watson Const. Co.	Grade, Pave, Structures, & Lighting	\$760,632
1-4TC88-F	Alameda	5	E, F, B	Greenville to 1.5 Mi. W. of Livermore	5.8	6/22/49	Harns Bros. & N. M. Ball Sons	Grade, Surface, & Lighting	953,990
1517	Ala. SF	5, 68	Oak, SF	See San Francisco County					
4T115	Alameda	69	Oak	Sta. 205+24 to Sta. 358+50		3/15/49	Day Labor	Directional Signs	11,000
4T126	Alameda	69	Oak	S.C.L. of Oakland to High St.	3.3	1/12/50	Day Labor	Signs, Stripes & Markings	6,500
4T127	Alameda	69	Oak	At 42d Ave. Interchange & High St. Overhead		3/ 2/50	Day Labor	Signs, Stripes & Markings	13,000
4T116	Alameda	69, 105	Oak	5th and Oak Sts., 6th and Oak Sts., and 7th and Madison Sts.		6/24/49	City of Oakland	Signals and Lighting	19,100
0-14TC53-F	Alameda	69	Oak	42d Ave. Interchange	0.7	8/ 3/48	Johnson, Drake, & Piper, Inc.	Grade, Pave, & Structures	1,746,972
1-14TC84-F	Alameda	69	SLn, Oak	Across San Leandro Cr. and S.P.R.R. Tracks at S.C.L. of Oakland		1/10/50	C. B. Tuttle Co.	Steel Bridge	722,549
13T2	Alameda	227	Oak	Rte. 75 to Park Blvd.		7/ 1/49	Joint Hwy Dist. No. 26	Grade & Surface	300,000
1-10TC58	Alameda			Various Locations				Minor Contracts & D.L. Projects	14,714
10DC7	Alpine	34	A, B	Westerly Boundary to Carson Pass	5.4	10/28/49	Johnston Rock Co.	Grade & Surface	292,324
	Alpine	FAS 959		7 Mi. E. of Markleeville to Mono County Line	5.5	7/ 6/49	Arthur B. Siri, Inc.	Grade & Drainage Facilities	84,400
	Alpine			Various Locations				Minor Contracts & D.L. Projects	515
	Amador			Various Locations				Minor Contracts & D.L. Projects	178
1-14TC82	Butte	3	B	Hamilton Slough & Biggs Extension Canal		11/ 9/49	Huetting & Schromm & A. T. Bennett Const. Co.	Const. & Widen Bridges	37,580
51-3TC2	Butte	3	D	Chico to Tehama County Line	10.0	4/ 1/50	Minton & Kubon	Widen Roadway & Structures	29,086
51-14TC10	But. Teh.	3	D, A	At Various Locations		6/14/50	O'Connor Bros.	Widen Bridges & Approaches	187,824
51-14TC1	But. Cle.	45	C, A	See Glenn County					
51-3TC3	Butte	87	A	0.7 Mi. N. of Yuba County Line to Union School	8.2	5/17/50	M. J. Ruddy & Son	Grade, Surface, & Structures	133,983
3DC20	Butte	FAS 757		2 Mi. E. of Chico to Paradise	9.2	5/ 9/50	A. G. Raisch Co.	Surfacing	113,500

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
51-10TC8	Butte	24	E	Various Locations	5.6	6/10/50	M. J. Ruddy & Son	Minor Contracts & D.L. Projects	\$616
10TC6	Calaveras	65	A	Murphys to Big Trees		8/15/49	Day Labor	Grade & Surface	298,413
	Calaveras			Murray Cr.				Detour, Signs, & Stripe	5,080
	Calaveras			Various Locations				Minor Contracts & D.L. Projects	790
	Colusa			Various Locations				Minor Contracts & D.L. Projects	899
1-4TMC18-P	Contra Costa	14	E/Cr	San Pablo Ave. at Fairmount & Poirero		5/ 9/50	L. H. Leonard Elec. Const. Co.	Traffic Signals	8,837
1-4TC107	Contra Costa	14	Her, B	Hercules to Oleum	1.6	6/28/50	J. R. Armstrong	Surface, Signals & Lighting	173,833
51-4TC2	Contra Costa	69	Rch	At Rust Drain		4/ 1/50	Lee J. Immel	R.C. Culvert	33,760
4TC133	Contra Costa	75	A	At Orinda Rd.		6/ 8/50	Day Labor	Improve Intersections	6,960
4TC130	Contra Costa	75	B	Monument to Concord	2.1	3/10/50	Day Labor	Subsealing	11,235
1-4TC101-F	Contra Costa	75	F, Pit	Port Chicago Rd. to Pittsburg	4.5	3/ 3/50	Parish Bros.	Grade, Surface, & Structures	878,048
	Contra Costa			Various Locations				Minor Contracts & D.L. Projects	5,760
51-1TC4	Del Norte	1	A	Klamath River Bridge to Wilson Cr.	6.7	4/ 1/50	Harms Bros. & C. M. Syar	Surface	273,058
51-1TC3-F	Del Norte	71	A, B	Smith River Bridge to ¼ Mi. N. of Winton Corners	4.7	4/12/50	N. M. Ball Sons.	Grade & Structures	433,519
	Del Norte			Various Locations				Minor Contracts & D.L. Projects	571
51-14TC5	El Dorado	65	B	½ Mi. W. to ½ Mi. E. of American River near Lotus	1.0	4/28/50	Thomas Const. Co.	Grade, Surface, & Structure	200,468
1-3TC70	El Dorado	93	B	2.4 to 3.4 Mi. W. of Georgetown	1.0	12/ 2/49	T. M. Montgomery	Grade & Seal Coat	43,257
	El Dorado			Various Locations				Minor Contracts & D.L. Projects	4,154
6TT26	Fresno	4, 41 125	Fre	In Fresno		8/ 9/49	City of Fresno	Traffic Signals	18,168
51-6TC2	Fresno	41	S	Kingsburg Canal near Centerville	0.5	6/22/50	Ted F. Baun	Culvert & Approaches	42,905
1-6TC19	Fresno	41	T	Orange Cove Rd. to White Deer Rd.	5.4	11/ 1/49	R. A. Heintz Const. Co.	Grade & Surface	473,106

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
1-6DC25-P	Fresno	FAS 559		On Madera Ave., Church Ave. to Adams Ave.	5.5	4/21/50	Gene Richards, Inc.	Grade & Surface	\$121,000
	Fresno			Various Locations				Minor Contracts & D.L. Projects	9,941
1-3TC73	Glenn	45	C	At Butte City Ferry Crossing		5/17/50	Baker Trucking Co.	Restore Levee	7,205
51-14TC1	Gle. But.	45	C, A	Big Butte Cr.		4/1/50	Transocean Eng. Co.	Bridge & Approaches	78,935
1-14DC54-P	Glenn	FAS 1117		Across Grindstone Cr. & Clark's Valley Cr.		9/19/49	Weidner Const. Co.	2 R.C. Bridges	54,300
	Glenn			Various Locations				Minor Contracts & D.L. Projects	230
51-14TC9	Humboldt	1	J	Across Redwood Cr. Overflow, 0.8 Mi. W. of Orick		6/14/50	Mercer, Fraser Gas Co., Inc. & Mercer, Fraser Co.	Bridge & Approaches	30,985
51-1TC7-F	Humboldt	1	J	0.5 Mi. S. of Stone Lagoon Summit to 1 Mi. S. of Orick	3.8	4/26/50	Mercer, Fraser Gas Co., Inc. & Mercer, Fraser Co.	Surfacing	220,896
1-1TC31-F	Humboldt	1	J	Stone Lagoon Summit to 1 Mi. S. of Orick	3.8	4/5/49	Piombo Const. Co.	Grading	731,544
51-1TC5	Humboldt	1	K	1 Mi. S. of Orick to 2 Mi. S. of Del Norte County Line	5.2	4/1/50	Mercer, Fraser Gas Co., Inc. & Mercer, Fraser Co.	Surfacing	224,756
	Humboldt	35	C	Mi. 3 to Mi. 8, E. of Bridgeville	2.5	2/23/50	Day Labor	Base, Surface, & Drainage	10,000
1T75	Humboldt			Various Locations				Minor Contracts & D.L. Projects	8,012
1-11VC58	Imperial	27	A, B	Midway Wells to Colorado River	9.7	4/21/50	E. S. & N. S. Johnson	Surfacing	63,279
11V56	Imperial	187	A	6.1 to 6.4 Mi. N. of Bond's Corner	0.3	9/19/49	Day Labor	Resurfacing & Bank Protection	12,375
1-11VC59	Imperial	187	B, C, D	Holtville to Calipatria	7.4	4/21/50	Arthur A. Johnson	Surfacing	84,074
1-11VC50	Imperial	187	E, F	Main St. in Niland to 2 Mi. NW. of Niland	2.2	11/15/49	Roland T. Reynolds & Thomas Const. Co.	Grade, Surface, & Structures	241,132
1-11VC52	Imp. Riv.	187	F, G, A	2 Mi. NW. of Niland to Durmid	6.0	12/9/49	E. L. Yeager Co.	Grade, Surface, & Structures	454,153
1-11VC54	Imperial	187	F, G	2 Mi. NW. of Niland to Riverside County Line	21.8	3/20/50	Hensler Const. Corp.	Grade & Surface	416,896

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
1-14V C98	Imperial	198	A	Across San Felipe Cr. Overflow		4/ 1/50	Anderson Co.	Bridge & Approaches	\$110,015
1-11V C55	Imperial	202	C	Ash Canal to S. Alamo Canal	0.6	3/18/50	Hubbs Equip. Co.	Grade & Surface	24,543
	Imperial			Various Locations				Minor Contracts & D.L. Projects	5,678
51-9VC5	Inyo	23	B	At Aberdeen & Black Rock Curves	0.6	5/17/50	E. C. Young & Co.	Grade & Surface	16,110
51-9VC1	Inyo	23	G	Little Lake to 3 Mi. N.	2.4	4/19/50	Halloran & Gill	Grade & Surface	22,766
	Inyo			Various Locations				Minor Contracts & D.L. Projects	1,317
1-6VC43-F	Ker, L.A.	4	A, J, D	2½ Miles South of Route 59 to Fort Tejon	11.4	6/26/50	N. M. Ball Sons	Grade, Pave and Structures	1,799,411
1-6VC42	Kern	4	C	0.6 Mile South of McKittrick Road to Hoskins Road	5.6	5/ 5/50	N. M. Ball Sons	Grade and Surface	803,355
1-6VC44	Kern	4	C	Intersection of Route 4 with Panama Rd. & Houghton Rd.		5/24/50	Clinton Elec. Corp.	Signals and Lighting	14,663
1-6VC45-F	Kern	4	E, F	Famoso Underpass to McFarland	5.8	6/22/50	Griffith Co.	Grade, Pave, and Structures	793,958
51-9VC6	Kern	23	A, C, D	Los Angeles County Line to Freeman Junction	23.2	5/17/50	G. W. Ellis Const. Co.	Surfacing	158,550
1-6VVC5-P	Kern	142	Bkd, A	Intersection of Route 142 and 34th St.		5/22/50	L. H. Leonardi Electric Const. Co.	Signals and Lighting	6,889
51-9VC4	Kern	145	A, B	Searles Road to Bademacher	3.3	5/11/50	E. C. Young & Co.	Grade and Surface	35,413
6DC22	Kern	FAS 575		Union Avenue to Fairfax Road	4.0	2/23/50	Oilfields Trucking Co. & Phoenix Const. Co., Inc.	Grade and Surface	140,000
	Kern			Various Locations				Minor Contracts & D.L. Projects	22,854
51-6TC1	Kings	125	C	0.2 to 5.2 Miles North of Kettleman City	5.0	4/ 1/50	Westbrook & Pope	Grade and Surface	104,757
14DC73-P	Kings	FAS 940		Across Kings River		6/28/50	W. E. Thomas Const. Co.	R. C. Bridge	37,000
	Kings			Various Locations				Minor Contracts & D.L. Projects	800
51-1TC6	Lake	15	A	0.4 Mile West to 0.7 Mile East of Tule Lake	1.4	4/19/50	M. W. Brown	Grade and Surface	207,514
1-1TC38	Lake	89	B	5.4 to 6.0 Miles North of Middletown	0.6	7/ 7/49	Arthur B. Siri, Inc.	Grade and Surface	55,878

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
1-7VC135-F	Lake			Various Locations				Minor Contracts & D.L. Projects	\$134
	Lassen			Various Locations				Minor Contracts & D.L. Projects	1,631
1-7VC135-F	Los Angeles	2	C	1.5 Miles West of Calabasas to 1.6 Miles East of Malibu	4.5	12/14/49	Basich Bros. Const. Co. & Basich Bros.	Grade, Surface, and Structures	766,709
7V158	Los Angeles	2	L.A.	Virgil Avenue to Glendale Blvd.	1.6	3/29/50	Day Labor	Signs, Stripe, & Markings	15,500
7V159	Los Angeles	2	L.A.	Glendale Blvd. to Grand Ave.	1.2	5/18/50	Day Labor	Signs, Stripe, & Safety Devices	7,000
0-14VC84	Los Angeles	2	L.A.	Los Angeles Street		4/23/49	J. E. Haddock, Ltd.	2 Overcrossings	478,951
0-7VC120-F	Los Angeles	2	L.A.	Virgil Avenue to Grand Avenue	1.6	6/9/49	N. M. Ball Sons	Grade and Surface	1,358,067
0-7VC96	Los Angeles	2	L.A.	Hill Street to Spring Street		1/18/49	Guy F. Atkinson Co.	Grade, Pave, and Structures	935,545
0-7VC127-F	Los Angeles	2	L.A.	Glendale Blvd. to Grand Avenue	1.2	6/24/49	N. M. Ball Sons	Grade and Surface	1,000,974
1-14VC93-F	Los Angeles	2	L.A.	On North Main St.		9/16/49	J. E. Haddock, Ltd.	2 R. C. Bridges	611,805
1-14VC96-F	Los Angeles	2	L.A.	Over Santa Monica Parkway and Heliotrope Drive		12/15/49	Chas. MacClusky Co.	Separation Structure	535,534
1-14VC97-F	Los Angeles	2	L.A.	At Hill Street		2/8/50	Spencer Webb Co.	R. C. Bridge	448,178
1-7VC155-F	Los Angeles	2	L.A.	Western Ave. to Virgil Ave.	1.7	5/11/50	Griffith Co.	Grade and Surface	1,562,892
1-14VC101-F	Los Angeles	2	L.A.	At Sunset Boulevard		5/25/50	Lars Oberg	R. C. Bridge	311,814
1-14VC102-F	Los Angeles	2	L.A.	At Fountain Avenue		6/2/50	Oberg Bros. Const. Co.	Grade, Pave, and Structures	328,827
1-7VC158	Los Angeles	2	L.A.	Virgil Avenue to Grand Avenue		6/20/50	Newberry Electric Corp.	Lighting and Illuminated Signs	146,444
1-7VC159	Los Angeles	2	L.A.	Near Santa Monica Blvd.		6/29/50	J. E. Haddock, Ltd.	Pumping Plant and Storm Drains	132,256
1-14VC104-F	Los Angeles	2	L.A.	At Wilton Place		6/29/50	Geo. W. Peterson & Jack W. Baker	R. C. Bridge	319,593
1-7VC157	Los Angeles	4	A, G	2.2 Miles North of Castaic Creek and at Palomas Wash		5/23/50	Electric & Machinery Serv., Inc.	Lighting	6,534
1-7VC144-F	Los Angeles	4	A, G	0.4 Mile South of Castaic Creek to 0.4 Mile North of Palomas Wash	5.1	2/1/50	Basich Bros. & Basich Bros. Const. Co. and W. C. Lefever & D. Gerald Bing	Grade, Surface, and Structures	840,321
1-7VC153	Los Angeles	4	H, I, J	Frenchmans Flat to 0.5 Mile North of Alamos Creek	5.3	5/5/50	A. Teichert & Son, Inc.	Grade and Surface	2,004,069
1-6VC43-F	L.A. Ker	4	J, D, A	See Kern County					
1-7VC139	Los Angeles	4, 213	LA, SFr	Various Locations		12/15/49	Clinton Electric Corp.	Signals and Lighting	24,741
1-7VC136	Los Angeles	9	Muro	Shanrock Ave. and Huntington Dr.	1.1	12/9/49	Vido Kovacevich Co.	Grade and Surface	120,717

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
7V149	Los Angeles	9	Pas	Santa Anita Ave. to Sierra Madre Villa	---	7/ 1/49	Day Labor	Widen Pavement & Structures & Install Signals	\$234,000
1-7VC147	Los Angeles	26	L.A. D	Macy Street to Helen Drive	---	2/ 9/50	Electric & Machinery Serv. Inc.	Lighting and Signs	37,447
7V157	Los Angeles	26	L.A. D	Evergreen Ave. to Helen Drive	---	3/23/50	Day Labor	Signs, Stripes, & Signals	8,150
1-7VC130-F	Los Angeles	26	L.A. D	Evergreen Ave. to East of Helen Drive	1.8	9/ 1/49	J. E. Haddock, Ltd.	Grade, Pave, and Structures	1,338,214
7VV135	Los Angeles	60	LBch	In Long Beach	---	11/22/49	Day Labor	Signals and Lighting	10,800
7V160	Los Angeles	61	C, D	Angeleno Crest Highway	---	6/29/50	Prison Labor	Grading	423,000
51-7VC4	Los Angeles	158	A, LA	Ohio Avenue to Bolas St.	1.3	4/ 1/50	Jesse S. Smith	Grade and Surface	43,829
1-7VC152	Los Angeles	158	L.A.	Sunset Blvd. to Ventura Blvd.	7.6	5/ 3/50	Schroeder & Co.	Surfacing	192,174
7V141	Los Angeles	158	L.A.	Wilson-East Canyon Channel	---	12/30/48	States Share	Storm Channel	45,000
51-7VC7	Los Angeles	165	L.A.	Lomita Blvd. to "I" Street	1.2	5/ 8/50	Warren Southwest, Inc.	Surfacing	62,811
1-14VC95	Los Angeles	165	L.A.	Harbor Freeway at 1st and 2nd Streets	---	11/18/49	Oberg Bros. Const. Co.	2 Bridges	448,774
7V150	Los Angeles	165, 205	L.A. Pas, SFas	On Arroyo Seco Parkway	---	8/23/49	Day Labor	Construct Refuge Areas	60,000
1-14VC103-F	Los Angeles	165	L.A.	Over Harbor Freeway at 3rd Street	---	6/10/50	Chas. MacClosky Co.	2 R. C. Bridges	339,020
1-14VC99	Los Angeles	166	A	Gage Avenue to Tweedy Lane	---	4/28/50	Macco Corp.	Bridge and Approaches	269,428
7VV99	Los Angeles	167	LBch	Various Locations	---	7/21/49	City of Long Beach	Traffic Signals	6,000
1-7VC156-F	Los Angeles	168	Emte	Garvey Ave. to Valley Blvd.	1.4	5/19/50	Vido Kovacevich Co.	Grade, Surface, & Structures	855,490
1-7VC133	Los Angeles	174	B	Lakewood Blvd. to Rosecrans Ave.	4.3	10/28/49	Basich Bros. & Basich Bros. Const. Co.	Grade, Surface, & Widen Structure	458,042
1-7VC143	Los Angeles	174	B	Rosecrans Ave. to Valley View Blvd.	---	1/23/50	C. D. Draucker, Inc.	Signals and Lighting	24,967
1-7VC141-F	Los Angeles	174	B	Rosecrans Ave. to Orange County Line	3.5	1/ 3/50	Peter Kiewit Son's Co.	Grade, Pave, & Structures	715,669
1-7VC134	Los Angeles	174	B	On Firestone Blvd.	---	11/29/49	Electric & Machinery Serv. Inc.	Signals & Lighting	29,722
1-7VC137	Los Angeles	213	SFr, L.A.	Pacoima Creek to Sayre Ave.	1.6	12/ 2/49	Vido Kovacevich Co.	Grade and Pave	251,255

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
14DC51	Los Angeles	FAS 834		Compton Creek Channel on Santa Fe Ave.		7/29/49	Geo. W. Peterson & Jack W. Baker	Bridge	\$196,500
14DC64	Los Angeles	FAS 838		Across San Gabriel River on Florence Ave.		1/20/50	Davies, Keusder, & Brown	R. C. Bridge	226,000
14DC58	Los Angeles	FAS 840		Across San Gabriel River on Rosecrans Ave.		10/11/49	John Strona	R. C. Bridge	225,500
14DC50	Los Angeles	FAS 852		San Gabriel River on Valley Blvd.	0.5	6/9/49	W. J. Distell	Bridge and Approaches	637,000
1-6TC20	Los Angeles	4	B, C	Various Locations				Minor Contracts & D. L. Projects	56,045
1-6TC21	Madera	4	C	0.5 Mile North of Berenda to Califa At Califa Wye.	4.1	6/10/50	Guy F. Atkinson Co.	Grade and Pave	460,454
4T117	Madera	1	C	Sta. 248 to Sta. 262		6/28/50	R. O. Ferguson Co.	Lighting	3,434
1-4TC104	Marin	69	SRL A	1/2 Mile to 1 Mile East of San Quentin Wye.		7/1/49	Day Labor	Install Subdrain	12,000
	Marin			Various Locations		5/23/50	Carey Bros. Const. Co.	Construct Dike	12,000
51-10TC7	Mpsa, Mer	18	A, I, A	See Merced County				Minor Contracts & D. L. Projects	1,787
10T75	Mariposa	110	B	Tuolumne County Line to Coulterville	9.0	7/1/49	Day Labor	Grade and Surface	40,000
10DC12	Mariposa	FAS 965		Coulterville to 2 Miles Northeastly	2.0	6/12/50	Paul E. Woof	Grade and Surface	61,000
	Mariposa			Various Locations				Minor Contracts & D. L. Projects	545
1T73	Mendocino	1	D	About 14 Miles North of Ukiah		10/4/49	Day Labor	Install Horizontal Drains	9,000
51-1TC8	Mendocino	1	Uki	Smith Street to Low Gap Road	0.6	5/23/50	O. C. Jones & Son	Grade, Pave, & Structures	221,025
51-14TC8	Mendocino	48	A	Whitehall Creek and Burger Cattlepass	0.2	6/5/50	Kenneth Whited	Culvert & Cattlepass	16,170
1-1TC37	Mendocino	48	A	Maple Creek to 1.2 Miles Easterly	1.2	5/20/49	A. R. McEwen	Grade and Surface	122,056

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
51-1TC1	Mendocino	56	A	Bacon Gulch to $\frac{1}{2}$ Mile North of Signal Port Creek	0.8	4/ 1/50	Arthur B. Siri, Inc.	Grade and Surface	\$108,523
51-14TC6	Mendocino	56	B	Across Mallo Pass Creek		5/ 5/50	Reed & Tuttle	Bridge Repair	24,528
51-1TC2	Mendocino	56	D	Salmon Creek, 20 Miles South of Fort Bragg	1.0	4/ 1/50	Arthur B. Siri, Inc.	Grade and Surface	117,126
1-14TC8	Mendocino	56	D	Salmon Creek, 0.6 Mile South of Albion		6/22/49	Judson-Pacific-Murphy Corp.	Bridge	344,882
1T71	Mendocino	56	F	Vicinity of Ten Mile River		8/23/49	Day Labor	Truck Scales	10,000
1-1DC11	Mendocino	FAS 979		Rte. 16 at Old Hopland to Largo	4.0	6/28/50	John Burman & Sons	Grade & Surface	89,000
	Mendocino			Various Locations				Minor Contracts & D.L. Projects	10,420
1-10TC61-F	Merced	4	A	Dutchman Cr. to Lingard	6.5	6/10/50	Guy F. Atkinson Co.	Grade, Pave, & Structures	847,994
51-10TC6	Mer, Stan	4	C, D, Lttn, A, Cer, B						
				Atwater to Hatch Rd. (Portions)	9.9	4/29/50	Stephen L. Vistica	Roadside Planting	13,731
51-10TC7	Mer, Mar	18	A, A, I	1.7 Mi. W. of Mariposa County Line to Cathay Jet.	8.7	5/31/50	Rice Bros., Inc.	Surfacing	170,608
51-10TC3	Merced	32	C	10.4 Mi. E. of Los Banos to San Joaquin River	5.3	4/ 1/50	Valley Paving & Const. Co., Inc.	Surfacing	176,252
51-14TC4	Merced	122	A	About 6 Mi. E. of Gustine		4/12/50	H. W. Ruby	Bridge & Approaches	112,556
	Merced			Various Locations				Minor Contracts & D.L. Projects	469
1-2TC39	Modoc	28	B, Alt	Chambers Ranch to Alturas	10.6	8/31/49	Clements & Co.	Resurfacing	270,606
1-2TC34	Modoc	28	C	Tons Cr. to Cedarville	8.1	5/24/49	R. B. Guerin & Co.	Grading	650,000
51-2TC1-F	Modoc	28	C	Tons Cr. to Cedarville	8.9	4/15/50	Rand Const. Co., Inc.	Grade & Surface	322,259
	Modoc			Various Locations				Minor Contracts & D.L. Projects	113
51-9VC3	Mono	23	I	Conway Summit to Bodie Rd.	6.1	5/ 8/50	Harns Bros.	Resurface	138,509
51-9VC7	Mono	95	A	Rte. 23 to Topaz Lake	9.3	5/18/50	Harns Bros.	Grade & Surface	59,836
51-9VC2	Mono	111	A	1 Mi. N. of Grant Lake to Jet. of Rte. 23	1.5	4/28/50	Westbrook & Pope	Grade & Surface	27,017

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length, miles	Contract date	Contractor	Type of work	Allotment
1-9DC10-P	Mono.	FAS 959		0.4 to 4.2 Mi. W. of U.S. Rte. 395	3.6	1/17/50	Westbrook & Pope	Grading	\$92,500
	Mono.			Various Locations					
51-5TC2	Monterey	2	B	Spence Underpass to 2 Mi. S. of Salinas	2.4	4/ 6/50	Granite Const. Co.	Minor Contracts & D.L. Projects	151
51-5TC4	Monterey	2, 117	Sal	In Salinas		6/29/50	R. Flatland	Grade & Surface	205,886
1-14TC79	Monterey	56	B, C, D, E	San Simeon to Carmel		9/ 8/49	Wm. Radtke & Son	Traffic Signals	18,944
1-14TC78	Monterey	56	J, Wat	Watsonville Jct. to Front St.		9/29/49	Dan Caputo & Ed Keeble	Repair 5 Bridges	155,194
					0.9			Grade, Surface, Structures, Signals & Lighting	513,326
1-5TTC1	Monterey	117	Sal	Main St. at Ronnie Lane		6/ 5/50	Els-Hokin & Galvan	Traffic Signals	11,543
5DC12-P	Monterey	FAS 661		Robinson Canyon Rd. to Los Laureles Rd.	3.7	12/14/49	John G. Mehren	Grading	185,000
	Monterey			Various Locations				Minor Contracts & D.L. Projects	5,424
1-4TC98	Napa	8, 49	A, D, Nap, B	Foster Rd. to Union Station	3.1	1/10/50	Fredrickson Bros.	Grade & Surface	313,789
1-4TC103	Napa	8	B	Intersection of Rte. 8 with FAS Rte. 776 & Imola Ave.		5/24/50	Fredrickson Bros.	Signals, Lighting, & Channelization	62,086
4TT138	Napa	49	SH1a	Elmhurst to Pratt		12/13/49	Day Labor	Improve Street	8,216
14DC68-P	Napa	FAS 1165		Conn Cr. 1 Mi. NE. of Yountville		4/12/50	W. E. Thomas Const. Co.	Widen Bridge	12,300
	Napa			Various Locations				Minor Contracts & D.L. Projects	2,176
3DC21-P	Nevada	FAS 1038		Rte. 15 to Washington	5.9	6/12/50	Huntington Bros.	Grade & Surface	155,500
1-8VC45	Ora, Riv.	43	B, A	See Riverside County					
1-7VC146	Orange	60	B, Lgn B	S.C.L. of Newport Beach to Myrtle Ave. in Laguna Beach	5.5	2/ 3/50	Hensler Const. Corp.	Grade & Surface	380,630
1-7VC151	Orange	171	A	Garfield Ave. to 21st St.	5.4	4/ 1/50	Sully-Miller Contr. Co.	Grade & Surface	144,416

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
1-7VC154	Orange	174	A	Artesia Ave. to Euclid Ave.	5.0	5/5/50	Clinton Elec. Corp.	Signals and Lighting	\$36,115
1-7VC148-F	Orange	174	A	Los Angeles County Line to 0.2 Mi. SE. of Euclid Ave.	2.9	3/29/50	Sully-Miller Contr. Co.	Grade & Surface	536,876
1-7VC149-F	Orange	174	A, Ana	Southeasterly of Euclid Ave. to Rte. 2		3/31/50	Griffith Co.	Grade & Surface	350,464
	Orange			Various Locations				Minor Contracts & D.L. Projects	22,693
1-14TC81	Placer	3	A, B	3.5 Mi. S. of Roseville to 0.9 Mi. S. of Sheridan	6.1	10/31/49	Fredrickson Bros.	4 Bridges & Approaches	123,941
1-14TC4	Placer	37	A	1 Mi. E. of Auburn to 1 Mi. W. of Applegate	6.1	5/24/50	Fredrickson Bros.	Surfacing	333,242
0-3TC60-F	Placer	37	A	Auburn to Applegate		5/20/49	United Concrete Pipe Corp., Ralph A. Bell & Westbrook & Pope		
3DC17-P	Placer	FAS 767		N. Fork of American River to 2.3 Mi. Easterly	2.3	9/15/49	J. P. Brennan & M. W. Brown	Grade & 2 Structures	1,186,463
	Placer			Various Locations				Grading	237,000
51-2TC5	Plumas	21	D	At Quincy High School Line Change	0.4	6/5/50	Steele & Easton	Minor Contracts & D.L. Projects	5,183
	Plumas			Various Locations				Grade & Surface	26,466
8V38	Riv. SBd.	26	Bau, B, A	See San Bernardino County				Minor Contracts & D.L. Projects	953
1-8VC42-F	Riv. SBd.	26	Bau, B, A	See San Bernardino County					
1-8VC45	Riv. Ora.	43	A, B	1.7 Mi. W. of Orange County Line to Corona	4.9	4/24/50	Peter Kievit Son's Co.	Grade & Surface	501,342
1-8VC48	Riverside	43	Cor	W. City Limits to E. City Limits of Corona	2.6	6/21/50	E. L. Yeager & Co.	Resurfacing, Signals & Lighting	295,538
1-8VC36	Riv. SBd.	43	Riv, C, F	Russell St. to San Bernardino County Line	2.6	5/26/49	J. A. Payton	Grade & Surface	500,914
1-11VC61	Riverside	64	H, I, B, C, D	Indio to Black Butte	21.4	6/22/50	R. P. Shea Co.	Resurfacing	87,079
0-14VC86-Y	Riverside	77	E	W. of Corona		5/25/49	R. M. Price Co. & O. B. Person	5 Structures	510,901
1-8VC39	Riv. SBd.	77, 192	E, A, A	3.6 Mi. W. of Corona to Plue Ave.	6.5	7/7/49	A. Teichert & Sons, Inc.	Grade, Surface, & Structures	681,383
1-11VC52	Riv. Imp.	187	A, F, G	See Imperial County					

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
8DC9	Riverside	FAS 720		Benton Rd. to Winchester	8.7	7/29/49	Geo. Herz & Co.	Imported Borrow & B.S.T.	\$223,500
11DC6	Riverside	FAS 735		Blythe to Palo Verde Mesa	5.8	11/14/49	Nathan A. Moore	Grade, Surface, & Structures	136,500
	Riverside			Various Locations				Minor Contracts & D.L. Projects	13,784
3TY6	Sacramento	3	B	North Sacramento Viaduct to 0.5 Mi. E. of Ben Ali		3/1/50	Day Labor	Signs, Guardrail & Guide Posts	8,375
3TY7	Sacramento	11	F, Sac	Sutterville Rd. E. to Sutterville Rd. W.	0.2	5/19/50	Day Labor	Widen & Pave	34,000
	Sacramento			Various Locations				Minor Contracts & D.L. Projects	3,966
1-5TC16-F	San Benito	2	B, A	Chittenden Rd. to 1 Mi. N. of San Benito River	2.3	5/19/50	Granite Const. Co.	Grade, Surface, & Structures	507,303
51-5TC3-F	San Benito	22, 119	Hst, B, F	Hollister to Santa Clara County Line	9.4	6/14/50	Fredrickson & Watson Const. Co.	Grade & Surface	465,381
14DC66-P	San Benito	FAS 670		At Tequisquito Slough Overflow & on Fairview Rd. near Hollister		4/7/50	Herbert H. Anderson	Culverts	9,000
	San Benito			Various Locations				Minor Contracts & D.L. Projects	270
8V38	Sbd. Riv.	26	B, A	2.3 Mi. E. of Redlands to Beaumont	9.6	3/2/50	Day Labor	Signs & Stripe	11,000
1-8VC42-F	Sbd. Riv.	26	B, A B, A B, A	2.3 Mi. E. of Redlands to Beaumont	9.6	11/17/49	Fredericksen & Kasler	Grade, Surface, & Structures	1,272,873
51-8VC1	San Bernardino	26	Ont	San Antonio Ave. to Corona St.	2.7	4/1/50	George Herz & Co.	Surfacing	54,157
1-8VC46	San Bernardino	31	H, J	Manix to Cronise Lake	16.1	4/29/50	Basich Bros. Const. Co. & R. L. & N. L. Basich	Widen & Surface	220,080
1-8VC47-P	San Bernardino	43 FAS 925							
1-8VC36	Sbd. Riv.	43	A, B	Jct. with Rte. 189 & Lake Gregory Rd. at Squirrel Inn	0.3	6/13/50	Ken Lowe	Grade & Surface	61,923
1-8VC39	Sbd. Riv.	192, 77	F, Riv, C A, E, A	See Riverside County See Riverside County					

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Alloiment
51-8VC2	San Bernardino	190	B	0.1 Mile West of Riverside to 0.1 Mile West of Cajon Creek	1.0	4/ 1/50	R. A. Erwin	Grade and Surface	\$48,556
1-8VC49	San Bernardino	190	SBd	Waterman Ave. to East City Limits of San Bernardino	0.9	6/28/50	Geo. Herz & Co.	Surface, Curbs, & Gutters	23,977
1-8VC43	San Bernardino	190	SBd	"E" St. to East City Limits of San Bernardino	1.8	3/31/50	Geo. Herz & Co.	Surfacing	138,858
51-8VC3	San Bernardino	190	Rld	North City Limits of Redlands to Route 26 and Orange Street to the East City Limits	4.4	4/28/50	Geo. Herz & Co.	Surfacing	39,717
8V37	San Bernardino	207	A	Long Point to 1.3 Miles West of Running Springs		7/ 1/49	Day Labor	Erosion Control	7,000
1-8VC31	San Bernardino	207	A	Long Point to 1.3 Miles West of Running Springs	4.0	4/ 6/49	Fredericksen & Kasler	Grade and Surface	879,395
1-8VC44-F	San Bernardino	207, 43	A, C	1.3 Miles West of Running Springs to Running Springs	1.7	4/29/50	Hess Const. Co., Inc.	Grade, Surface, & Structures	436,300
51-9VC8	San Bernardino	212	A, B	Kern County Line to 5.5 Miles East of Salt Wells	14.8	6/14/50	Oilfields Trucking Co. & Phoenix Const. Co., Inc.	Grade and Surface	126,200
8DC10-P	San Bernardino	FAS 925		Route 43 to Huston Flat	2.2	8/13/49	Spicer Co.	Grade and Surface	244,539
1-11VC57	San Bernardino	2	A, B, C, D	Various Locations				Minor Contracts & D. L. Projects	13,549
51-14VC1	San Diego	2	G, ChV	Del Mar to San Onofre	11.2	4/14/50	Griffith Co.	Surfacing	196,060
1-11VC48-F	San Diego	2	NatC, G, ChV	At Main Street & at "H" Street		6/ 5/50	Chas. MacClosky Co.	2 Bridges & Approaches	165,137
				"H" St. in Chula Vista to 14th St. in National City	2.6	11/ 7/49	Chas. MacClosky Co., R. E. Hazard Contr. Co. & C. G. Willis & Sons, Inc.	8 Bridges & Approaches	1,465,838
11V57	San Diego	2	NatC	7th Street to 16th Street		4/ 5/50	Day Labor	Detours	5,100
11V58	San Diego	2	NatC	7th Street to 16th Street		4/19/50	Day Labor	Signals & Track Work	34,000
1-11VC60	San Diego	2	NatC	16th Street to 7th Street Channel	0.7	5/11/50	R. E. Hazard Contr. Co.	Grade and Surface	150,371
1-11VC6-P	San Diego	2	SD	On Harbor Drive at 8th Avenue		6/14/50	V. R. Dennis Const. Co.	Signals & Lighting	38,957
1-11VC62	San Diego	12	D	The Willows to 4 Miles East	3.9	6/29/50	Clyde W. Wood & Sons, Inc.	Grade and Pave.	469,750

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
1-11VC7-P	San Diego	12	SD	Intersection of Canon and Rosecrans		6/20/50	Eis-Hokin & Galvan	Traffic Signals	\$4,058
1-11VC51-F	San Diego	77	A	North City Limits of San Diego to Miramar	6.5	11/18/49	Cox Bros. Const. Co.	Surfacing	449,066
1-11VC56-F	San Diego	77	A, B	Miramar to Lake Hodges	11.8	4/1/50	Peter Kiewit Sons' Co.	Surfacing	236,453
51-11VC1	San Diego	78	A, B	At Boulder and Sevilla Creeks	1.0	5/11/50	Arthur A. Johnson	Culvert & Approaches	61,034
	San Diego			Various Locations				Minor Contracts & D. L. Projects	18,694
4T103	San Francisco	2	SF	Alamany Blvd.		3/29/48	Day Labor	Reconstruction	96,000
1-4TC82-F	San Francisco	68	SF	Augusta St. to 25th St.	1.3	5/11/49	Guy F. Atkinson Co. & Chas. L. Harney, Inc.	Grade, Surface, Structures, Signals & Lighting	3,135,348
1-15TC4	San Francisco	68	SF	On San Francisco-Oakland Bay Bridge		6/22/50	Calif. Steel Products Co.	Const. Painting Scaffolds	42,975
15T7	S.F. Ala.	68, 5	SF, Oak	San Francisco-Oakland Bay Bridge		6/30/50	Day Labor	Operation, Maintenance, & Insurance	1,500,000
	San Francisco			Various Locations				Minor Contracts & D. L. Projects	2,870
10T77	San Joaquin	4, 5	E, Stkn, C, Stkn	Mariposa Road to Calaveras River & Wilson Way to Route 4	7.2	11/2/49	Day Labor	Signs and Stripe	16,542
1-10TC45-F	San Joaquin	4, 5	E, Stkn, C, Stkn	Mariposa Rd. to Calaveras River & Wilson Way to Route 4	7.2	4/1/49	Unified Concrete Pipe Corp.	Grade and Pave.	1,143,181
1-10TC60	San Joaquin	4, 5	E, Stkn, C, Stkn	Mariposa Road to Calaveras River		3/1/50	R. Gould & Son	Lighting	38,132
10DC13	San Joaquin	FAS 908		Grant Line Road	3.7	6/22/50	P. J. Moore & Son	Grade and Surface	110,000
	San Joaquin			Various Locations				Minor Contracts & D. L. Projects	13,210
1-5VC35-F	San Luis Obispo	2	B	Atascadero to 1 Mile South of Templeton	4.1	4/21/50	M. J. B. Const. Co.	Grade, Surface, & Structures	696,577
1-5VC26-F	San Luis Obispo	2	D	Cuesta Siding to Santa Margarita	2.1	4/20/49	Granite Const. Co.	Grade and Surface	467,182
1-5VC34	San Luis Obispo	33	C	Route 125 to Kern County Line	4.2	3/29/50	Granite Const. Co.	Surfacing	108,610
51-5VC1	San Luis Obispo	33	D	At Black Mountain Creek	0.1	4/29/50	Thomas Const. Co.	Replace Bridge with Culvert	11,033

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
1-14VC100	San Luis Obispo	56	C	Cayucos Creek.....	0.7	5/18/50	Madonna Const. Co.....	Bridge and Approaches.....	\$127,986
51-14VC2	San Luis Obispo	57	B	38.9 Miles to 46.6 Miles East of Santa Maria.....		6/14/50	E. G. Perham.....	Construct 4 Culverts.....	27,500
1-4TTC11-P	San Luis Obispo	2	RdwC	Various Locations.....				Minor Contracts & D. L. Projects.....	4,419
	San Mateo.....			Whipple Ave. to Woodside Road.....		1/10/50	L. H. Leonardi Electric Const. Co.....	Signals & Lighting.....	35,363
51-4TTC4	San Mateo.....	56	C	1 Mile South of Lobitos to ½ Mile North of Lobitos.....	1.3	6/ 2/50	Westbrook & Pope.....	Grade and Surface.....	233,870
1-4TTC99	San Mateo.....	56	C	Frenchman's Creek to 1 Mile Northerly.....	1.0	1/20/50	Eugene G. Alves.....	Grade and Surface.....	93,971
1-4TTC106	San Mateo.....	56	DIC	Alemanay Blvd. at Westlake Subdivision.....		6/ 5/50	Minton & Kubon.....	Culvert.....	14,694
1-4TTC96	San Mateo.....	68	SSF, F, Burl	Grand Ave. in South San Francisco to Broadway in Burlingame.....	5.5	11/ 1/49	Leonard Coates Nurseries, Inc.....	Roadside Planting.....	41,576
1-4DC14	San Mateo.....	FAS 1048		1.7 Miles North of Portola Road to Mayfield Ave.....	2.6	5/ 5/50	Eugene G. Alves.....	Grade, Armor Coat, & Structure.....	127,850
1-5VC36	San Mateo.....			Various Locations.....				Minor Contracts & D. L. Projects.....	12,483
1-5VC32-F	Santa Barbara.....	2	E, D	½ Mile North of Las Cruces to 1 Mile North of Summit.....	3.1	5/11/50	Granite Const. Co.....	Grade and Surface.....	708,317
	S.B., Ven.....	2	G, H	0.2 Mile East of Ventura County Line to 0.2 Mile East of Carpinteria.....	2.5	10/11/49	Granite Const. Co.....	Grade and Surface.....	730,162
1-5VVC3	Santa Barbara.....	2	S.B.	Rancheria at Carrillo St. & Michelorena St. at Mission St.....		6/ 9/50	Westates Electrical Const. Co.....	Signals and Lighting.....	32,110
51-5VC2	Santa Barbara.....	2	S.B.	Garden St. to Rancheria St.....	0.7	4/29/50	Santa Barbara Crane Serv.....	Remove & Replant Palm Trees.....	7,009
51-5VC3	Santa Barbara.....	57	D	4 Miles East of Cuyama Maintenance Station to 3 Miles West of San Luis Obispo County Line.....	3.0	6/ 8/50	Rand Const. Co., Inc.....	Surfacing.....	29,614
	Santa Barbara.....			Various Locations.....				Minor Contracts & D. L. Projects.....	1,687
51-4TC1	Santa Clara.....	2	B	3.3 Miles South of San Jose to Madrone.....	5.8	4/ 1/50	Leo F. Piazza.....	Resurfacing.....	113,239

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
1-4TC97-F	Santa Clara	2	C	2.6 Mi. South of Gilroy to ½ Mi. South of Sargent Overhead.	3.1	12/ 7/49	Fredrickson & Watson Const. Co.	Grade, Surface, and Structures	\$637,496
1-4TC102-F	Santa Clara	2	Gil, C	Gilroy to 2.6 Miles South of Gilroy	2.6	5/ 4/50	Fredrickson & Watson Const. Co.	Grade and Surface	239,157
4TT144	Santa Clara	2, 5	SJs	Intersection of Routes 5 and 2		1/ 4/50	City of San Jose	Signals & Controls	114,422
51-4TC3	Santa Clara	5	C	3.7 Miles North of Santa Cruz County Line to 1.1 Miles South of Junction with Route 42	1.75	5/18/50	Guy F. Atkinson Co.	Grade and Surface	1,505,327
1-4TC94-F	Santa Clara	32	C	Cape Horn to Merced County Line	3.3	10/28/49	Eaton and Smith	Grade and Surface	985,838
1-4TT13-P	Santa Clara	68	B, SJs	Bayshore Highway at North 1st St.		3/29/50	Dan Caputo	Signals and Lighting	30,272
1-4TT14	Santa Clara	114	A	Sunnyvale-Saratoga Rd. at Stevens Creek Road		5/10/50	E. G. Kurze Electrical Works	Signals and Lighting	10,627
	Santa Clara			Various Locations				Minor Contracts & D. L. Projects	9,097
51-4TC6	Santa Cruz	56	B	At Respini Creek, 2.3 to 1.5 Miles South of Davenport	0.7	6/12/50	Elmer J. Warner	Grade and Surface	112,381
4T132	Santa Cruz	56	D, E, SC	Rob Roy Junction to Morrissey Avenue	7.7	3/14/50	Day Labor	Signs, Stripe, & Markings	6,600
51-14TC7	Santa Cruz	116	A	San Lorenzo River, 10 Miles North of Santa Cruz		5/18/50	Huetfig, Schromm & Bennett	Repair 2 Bridges	12,541
4DC15-P	Santa Cruz	FAS 1147		½ Mile South of San Andreas School to Manresa Beach	2.3	5/10/50	Ed Keeble	Grade and Surface	55,000
	Santa Cruz			Various Locations				Minor Contracts & D. L. Projects	5,084
1-2TC40	Shasta	3	A, Rdg	Anderson to Redding	9.8	5/24/50	Fredrickson & Watson Const. Co.	Grade, Surface, & Structures	641,601
1-2TC30	Shasta	3	A	Anderson to Clear Creek	5.8	4/15/49	Fredrickson & Watson Const. Co.	Grade, Surface, & Structures	796,464
51-2TC3	Shasta	20	C	Across Oak Run Overflow		5/17/50	J. P. Brennan	Culvert & Approaches	10,194
51-2TC6	Sha. Sis, Plu	21, 29	Var	Various Locations	50.9	5/31/50	Morgan Const. Co.	Seal Coat	61,095

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
1-14DC72	Shasta	FAS 1074		Across Sacramento River, 1½ Miles North of Anderson.		6/13/50	M. A. Jenkins & R. E. Hertel	R. C. Bridge	\$284,000
1-3TC67	Shasta			Various Locations				Minor Contracts & D. L. Projects	2,824
	Sie, Yub.	25	A, A	See Yuba County					
	Sierra			Various Locations					
51-2TC2-F	Siskiyou	3	A	Spring Hill to Weed	8.0	4/12/50	Rand Const. Co., Inc.	Minor Contracts & D. L. Projects	150
2T78	Siskiyou	46	C	Scott River		6/29/49	Day Labor	Grade and Surface	491,523
	Siskiyou			Various Locations				Repair Bridge	15,000
								Minor Contracts & D. L. Projects	10,806
51-10TC4	Solano	7	D	County Road to Vacaville to 2.5 Miles North	2.4	4/11/50	Fredrickson Bros.	Widen and Surface	85,000
1-10TC62-F	Solano	7, 8	H, B, A	Cordelia Underpass to Ledgewood Creek	6.0	6/14/50	Parish Bros.	Grade, Surface, & Structures	1,173,085
10T73	Solano	7, 6	I, A	Milk Farm Intersection & Fresno Corner Intersection		3/23/49	Day Labor	Channelization	9,200
10T78	Solano	101	A	So. Fork of Lindsey Slough		4/ 6/50	Day Labor	Replace Bridge with Culvert	9,900
51-14TC2	Solano	208	A	Napa River at West City Limits of Vallejo		4/ 1/50	Payne Const. Co.	Repair Bridge	23,735
51-14TC3	Solano	208	B	White Slough ½ Mile East of Napa River Bridge		4/ 1/50	Lew Jones Const. Co.	Construct Bridge	65,674
	Solano			Various Locations				Minor Contracts & D. L. Projects	5,430
51-4TC5	Sonoma	1	A	Cloverdale to Healdsburg (Portions)	4.9	6/ 8/50	J. R. Armstrong	Grade and Surface	171,593
4T122	Sonoma	1	E, SR0, B	0.3 Mile South to 1.7 Miles North of Santa Rosa		10/18/49	Day Labor	Revise Signals	25,000
1-4TC92	Sonoma	8	A	Petaluma Creek to Tolay Creek	3.9	9/15/49	Piombo Const. Co.	Grade and Surface	530,000
14DC70-P	Sonoma	FAS 786		Across Hobson Creek at Hacienda		4/20/50	G. M. Carr & Bati Rocca	Bridge and Approaches	85,000
	Sonoma			Various Locations				Minor Contracts & D. L. Projects	13,227

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
51-10TC6	Sta, Mer	4	A, C, B, C, D, Lvn	See Merced County					
1-10TC63-P	Stanislaus	4	Tur	Cler Avenue to North City Limits of Turlock	0.2	6/14/50	United Concrete Pipe Corp.	Widen and Surface	\$20,363
51-10TC2	Stanislaus	13	A, Rybk, A, Okdl, B	Junction of Route 109 to 1 Miles East of Oakdale	11.2	4/ 1/50	Munn & Perkins	Surfacing	211,302
	Stanislaus			Various Locations				Minor Contracts & D. L. Projects	3,260
51-3TC1	Sutter	87	B	Tudor Road to Lincoln Road	5.6	4/ 1/50	Rice Bros., Inc.	Surfacing	104,331
	Sutter			Various Locations				Minor Contracts & D. L. Projects	999
51-14TC10	Teh, But	3	A, D	See Butte County					
51-2TC4	Tehama	7	A, B, Cug	Southerly Boundary of Tehama County to Proberta	20.6	4/18/50	McGillivray Const. Co.	Widen and Surface	411,100
1T77	Trinity	35	A	South Fork of Trinity River		5/31/50	Day Labor	Repair Bridge	2,500
	Trinity			Various Locations				Minor Contracts & D. L. Projects	815
1-6VVC4	Tulare	4	B	Intersection of Route 4 and 6th St. in Tipton		4/29/50	L. H. Leonardi Electric Const. Co.	Signals and Lighting	13,319
1-6VC41	Tulare	10	Vis, C	Visalia to Venida Substation	8.1	3/24/50	Griffith Co.	Surfacing	104,349
1-6DC23-P	Tulare	FAS 1137		State Route 134 to 6 Miles North	6.0	2/23/50	Geo. E. France, Inc.	Grade and Surface	139,008
	Tulare			Various Locations				Minor Contracts & D. L. Projects	6,817
1-10TC59-F	Tuolumne	13	B	Montezuma Road to 1 Mile South of Jamestown	1.75	12/ 2/49	Geo. E. France, Inc.	Grade and Surface	195,908
10T79	Tuolumne	40	B	Big Oak Flat to Chinese Camp	0.4	6/30/50	Day Labor	Grade and Surface	15,000
10DC10-P	Tuolumne	FAS 919		Route 13 to Stanislaus County Line	12.6	3/ 8/50	Chittenden & Chittenden	Grade and Surface	178,000

INCOMPLETE CONTRACTS—Continued

Contract number	County	Route	Section	Location	Length miles	Contract date	Contractor	Type of work	Allotment
	Tuolumne			Various Locations					
14V2	Ventura	2	B	S. P. R. R. Crossing in Camarillo		9/21/49	Southern Pacific Railroad	Minor Contracts & D. L. Projects	\$2,574
1-5VC32-F	Ven, S.B.	2	G, H	See Santa Barbara County				Signals	13,000
1-7VC142	Ventura	60	Oxn	North City Limits to South City Limits of Oxnard	1.9	1/30/50	Baker & Pollock	Grade and Surface	284,493
1-7VC145	Ventura	60	Oxn	Oxnard Blvd. at Saviers Wooley Road		1/30/50	Westates Electrical Const. Co.	Signals and Lighting	12,534
	Ventura			Various Locations				Minor Contracts & D. L. Projects	10,021
1-3TC71	Yolo	6	B	On Yolo Causeway	3.1	2/11/50	Grason Electric Co.	Lighting	33,604
51-3TC5	Yolo	6	B	South Half of Yolo Causeway	2.6	6/22/50	Brighton Sand & Gravel Co.	Surfacing	19,084
51-3TC6-F	Yolo	6, 99	C, B	Intersection of Routes 6 and 99	0.56	6/27/50	Chas. MacClosky & Harms Bros.	Grade, Surface, and Structures	298,369
	Yolo			Various Locations				Minor Contracts & D. L. Projects	133
3TB4	Yuba	3	B, Mvl	Yuba River Bridge at "D" Street		11/18/49	Day Labor	Repair Bridge	8,000
1-3TC2-P	Yuba	3, 15	Mvl	At 10th and E Sts., and on 9th St. between E St. and B St.	0.3	5/11/50	Rice Bros., Inc.	Resurfacing	21,026
1-3TC67	Yub, Sie	25	A, A	¼ Mile West to 2.6 Miles East of Yuba-Sierra County Line	2.1	11/ 9/49	Louis Biasotti & Son	Grade and Surface	271,646

APPENDIX D

AVERAGE CONTRACT PRICES

1912 to June 30, 1950

AVERAGE CONTRACT PRICES,⁴ 1912 TO 1950

Year (beginning July 1, 1920, costs are for fiscal years ending June 30 of year shown)	Grading ² (per cu. yd.)	Class "A" (6 sacks per cu. yd.) Portland cement concrete pavement, (per cu. yd.)	Class "B" ³ (5 sacks per cu. yd.) Portland cement concrete pavement, (per cu. yd.)	Asphalt concrete (per ton)	Plant mixed surfacing (per ton)	Crusher run base (per ton)	Portland cement concrete structures (per cu. yd.)	Bar reinforcing steel (per lb.)	Structural steel (per lb.)
1912	\$0.39		\$5.82	\$6.04					
1913	0.46		5.91	6.46					
1914	0.51		6.75	6.71					
1915	0.45		6.26	6.80					
1916	0.37		6.37						
1917	0.73	\$8.03		8.52					
1918	0.78	10.51							
1919	0.96	13.08							
1920 ¹	1.10	16.25		9.07					
1921	0.94	17.34		9.40					
1922	0.71	14.29		7.92					
1923	0.74	13.18		8.10					
1924	0.75	13.49		7.27					
1925	0.59	10.85		6.43					
1926	0.44	10.58		5.13					
1927	0.50	10.74		5.68					
1928	0.56	10.23		4.70					
1929	0.45	16.23		4.32					
1930	0.42	8.46		3.40					
1931	0.32	7.17		3.17					
1932	0.28	7.12		3.72					
1933	0.25	5.94		3.47					
1934	0.27	7.33		3.37					
1935	0.26	8.00		3.36					
1936	0.42		7.44	3.37					
1937	0.36	8.00	7.50	3.51					
1938	0.29	7.58	7.23	2.84					
1939	0.29	7.44	6.88	2.94					
1940	0.22		7.68	2.97	\$2.16	\$1.54	\$18.33	\$0.040	\$0.083
1941	0.26		7.54	3.18	2.84	2.31	23.31	0.053	0.107
1942	0.35		9.62	4.16	4.02	2.81	29.48	0.073	0.103
1943	0.43		11.48	4.76	3.71	2.26	31.76	0.059	0.080
1944	0.50	10.46	10.46	4.50	4.10	2.45	31.99	0.054	0.132
1945	0.51	10.90	10.90	4.88	4.20	2.42	37.20	0.059	0.102
1946	0.41	9.48	9.48	4.68	4.00	2.45	37.38	0.060	0.099
1947	0.46	12.38	12.38	5.38	4.32	2.42	48.44	0.080	0.138
1948	0.55	13.04	13.04	5.38	4.30	2.43	49.86	0.092	0.126
1949	0.49	12.28	12.28	4.64	4.67	2.67	48.67	0.096	0.117
1950	0.40	11.11	11.11	3.75	4.26	2.25	43.45	0.079	0.094

¹ Only a six-month period, January 1, 1920, to June 30, 1920.² Includes all earthwork to 1924. Does not include structure excavation since 1924. Roadway excavation only since 1939.³ 1:23:5 mixture used 1912 to 1916.⁴ Weighted averages.

